Cemetery Cleaning and Restoration

Resetting a Military Grave Stone

Many of our pioneer cemeteries have marble military markers that are leaning and need attention. Bringing one to a vertical is relative an easy procedure --- providing that you know its dimensions and how to correctly reset the stone. Remember these two important points: (1) **Do no harm** and (2) **Take no action that cannot be reversed**.

Do not set any grave stone in wet concrete…ever!

Let's Get Started!

Basic information: Choose a dry weather period because wet stones break easily. Be very careful when using metal tools; they scratch stone and these scratches cannot be removed.

Tools and Material: Shovel or spade, plastic trowel, level, tape measure, small piece of plastic tarp for dirt, aggregate of crushed limestone rock or pea gravel & sand mix. Note: crushed limestone should have both fines and coarse rock (graded limestone ranges from crushed fines up to ½" maximum). Mix equal parts of pea gravel and sand. Either choice of aggregate will pack well.

Most government provided stone military markers were made in several sizes;
Length: 30" to 42". Width: 14" or less. Thickness: 4" or less.

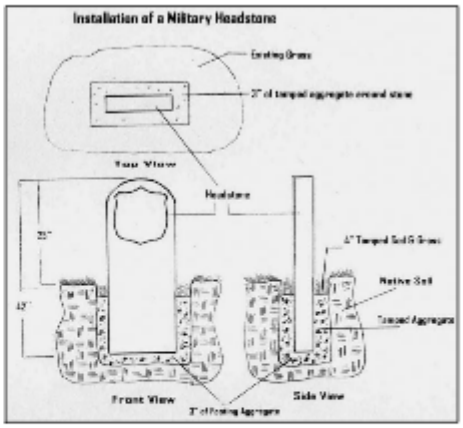
Resetting to the proper depth varies according to the stone's length. See government directions and standards listed below.

Do not cover any military information.

Simplest Procedure

- Remove the dirt opposite the direction of lean and from each narrow side.
- Save dirt on a plastic tarp.
- Wiggle (carefully) the stone to vertical. Use level to plumb in all directions.
- Replace and tamp dirt in the created void.

Government Directions & Standards (Condensed version)



- Remove sod and dirt from all sides. Save dirt on plastic tarp.
- Remove grave stone.
- Dig out hole to a minimum of 3" below final elevation of stone.
- Add aggregate in bottom and tamp solid.
- Measure from top of arc or point so depth so will be appropriate for length of stone.
    - 25" above grade for final elevation for a 42" stone.
    - 22" above grade for final elevation for a 35" or 39" stone.
    - 12" above grade for final elevation for a 30" stone.
- Insert grave stone in hole.
- With a level, plumb grave stone vertical in all directions.
- Place aggregate in 3 inch layers around all sides of headstone. Tamp solid each layer.
- Leave 4" at the top for dirt; tamp solid and replace sod (reseed if necessary).

Feb 2011

City Cemetery, Shelbyville, Indiana, May 12, 2018


PETER JOICE
CO. F.


PETER JOICE
CO. F.

Newspaper article: View Newspaper Article

City Cemetery, Shelbyville, Indiana, May 13, 2017

(L to R) FRONT ROW: Mike Beck, PDC. BACK ROW: Garry Walls, PCC – Bob Winters – Joe Beckman – John Bowyer, PCC – Tim Beckman, PCC. Photographer: Jim Floyd.


HENRY L. SPARKS
CO. D.
72 IND. INF.
May 13, 2017 - Before
May 13, 2017 - Immediately After


HENRY L. SPARKS
CO. D.
72 IND. INF.

City Cemetery, Shelbyville, Indiana, May 14, 2016

(L to R) Bob Winters – Jim Floyd – Joe Beckman – Tim Beckman, PCC – Mike Beck, PDC. Photographer: Jerry Thompson.


SUTHERLAND
GRANDPARENTS
JOHN W.
EMILY BLACK
1880
DIED
1916
THEIR SON
JAMES MONROE
DIED 1882


JAMES THOMAS
CO. D


NEAL
ROBERT H. NEAL
DEC. 25, 1817
AUG. 9, 1862
LUCY WELLS NEAL
AUG. 10, 1823
MAR. 23, 1862
ROBERT H. JR.
JUNE 8, 1857
NOV. 16, 1856


BROTHER
JAMES ZACHARY
COLESCOTT
BORN
NOV. 9, 1846
DIED
JUNE 6, 1899


BUTLER
WILLIAM O.
1837 —— 1909
Co. K. 7TH IND. VOL.
SARAH J. HIS WIFE
1843 —— 1912

« ‹ 1 of 2 › »

Gravestone Cleaning and Repair, Salem Church Cemetery, Hendricks County, Indiana, April 8, 2006

On a very windy Saturday, April 8th, 2006, seven members of the Ben Harrison Camp cleaned and/or repaired six Civil War Veteran's grave stones in the Salem Church Cemetery in Hendricks County, Liberty Township Indiana. This cemetery is located at the intersection of County Road 850 S & 375 E. The cemetery is situated next to the beautifully reconstructed Salem Church. The Workshop was conducted by Camp Commander Phil McClure who has many years of experience in such matters. The six Civil War veterans whose stones were repaired and/or cleaned are as follows:

John W. Cutshall, Musician, Co. H, 54th Indiana Volunteer Infantry
George B. Cutshall, Musician, Co. H, 54th Indiana Volunteer Infantry
John M. Bray, Private, Co. B, 7th Indiana Volunteer Infantry
Jesse B. Carter, Private, Co. C, 70th Indiana Volunteer Infantry

Lewis C. Franklin, Private Co. C, 70th Indiana Volunteer Infantry
Miles W. Bray, Private, Co. C, 70th Indiana Volunteer Infantry

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Note: The stone of Enos C. Bray was cleaned on November 6, 2006 and was not cleaned in April with the others because it was not known at the time that he was a Civil War veteran.

His name and regiment are as follows:

Enos C. Bray, Private, Co. B, 7th Indiana Volunteer Infantry

The pictures of the six stones are shown below, before and after cleaning and/or repair.

The Camp members in attendance were: Camp Commander Phil McClure, Mike Beck, Tim Beckman, Garry Walls, David Wiley, Jerry Thompson, and Roger Lester (see the pictures below of the work in the cemetery).

The camp would like to thank the Salem Church and members John and Phyllis Parsons for their help and assistance in this project.


CO. B,
54TH IND. INF.


J.M. GRAY
CO. B.
7TH IND. INF.


DIED
Feb. 6. 1863.
Aged 24 yrs. 10 mo.


DIED
AUG. 21, 1865


AGED
26Yrs. 10 Mos.
& 27Ds.

Effectively and Safely Cleaning Headstones – click to view full size

Effectively and Safely Cleaning Gravestones with a Minimal Amount of Work
(Updated October 2020)

One of the frustrating things about cleaning gravestones, at least for me, has been the less than clean looking results after one has spent a great deal of time and effort in cleaning a stone. The only approved cleaner, up till now, has been a mild detergent or clear ammonia. Even with aggressive hand washing with a stiff plastic brush, the final results had always been less than desired. Sure the stone was cleaner, but the stone still *looked* dirty.

Let me introduce you to a fantastic cleaning product that is now approved for use on gravestones. It is called **D/2** and is manufactured by Biological Solutions, Inc. D/2 is classified as biocidal cleaner and contains quaternary ammonium compounds. D/2's features and benefits are described as follows: Safe for landscape plantings and grass - effective on all types of stone, concrete and brick masonry - nonfuming - low-odor formulation - minimal precautions required for handling and storage - easy to apply with brush, roller or coarse spray – biodegradable. By most accounts it is considered a "green" product.

A small amount of this products will go a long way. Read the manufacturer's instructions that come with the product. D/2 should be used in the concentrated form for best results. One can adequately clean a standard size upright military gravestone with about 6 ounces of the product. According to the manufacturer the unopened D/2 has a shelf life of 5 years, but it should last almost indefinitely if kept in a cool and dry place and if the product is never allowed to freeze. As soon as you spray the product on the stone, you should start to see the product working on the algae and lichen (green or black streaks running down from the applied area. Some people using this product have reported good results with no scrubbing at all. I would recommend at least some gentle scrubbing after the product is applied to aid in the removal of biological growth. After a short contact time (3-5 minutes) and some gentle scrubbing, rinse the stone well with clean water. You will be amazed on how well this product works. Immediately after cleaning, the stone will actually *look* cleaner, but the stone will look even whiter and cleaner (for the standard upright white marble military stone) 4-6 weeks *after* it has been cleaned!! D/2 will even deter future biological growth on the cleaned stone for about 2 to 3 years (see my own independent tests at the end of this document). D/2 can also be used on other types of gravestones, including limestone and granite.

Important Note: The first rule in cleaning any gravestone is to do no harm. If the stone is too fragile and/or broken, do not attempt to clean it. It should be repaired or stabilized first by an experienced gravestone restorer before any type of cleaning is attempted.

I bet some of you are still skeptical, so here is a study the Department of Veteran Affairs National Cemetery Administration conducted with the help from the National Park Service, National Center for Preservation Technology and Training: http://ncptt.nps.gov/blog/best-practice-recommendations-for-cleaning-government-issued-marble-headstones/

How Much is D/2 and Where Can it be Purchased?

The phrase "you get what you pay for" certainly applies here. D/2 is not cheap. D/2 can be purchased for about $50-$60/gallon. You can generally get it a little cheaper if you

Best Practices for Cleaning Headstones – click to view full size

Best Practice Recommendations for Cleaning Government Issued Headstones[1]

This document was developed as general guidance for the cleaning of government issued headstones based on research undertaken by the National Park Service National Center for Preservation Technology and Training and funded by the Department of Veterans Affairs National Cemetery Administration. Recommendations are intended to be used by cemetery directors, operations staff, foremen, maintenance staff, contractors and headquarters staff. The document focuses on general cleaning and regular maintenance of marble headstones that are soiled from dirt and biological growth. Recommendations do not address cleaning needs from unusual events such as removal of road tar, mower scars, vandalism, or other accidental damage. Cleaning recommendations for other stone types such as granite, sandstone, or limestone are not presented here.

One of the critical components of maintaining the appearance of a national cemetery is the cleaning of headstones. Many of the more than 3 million gravesites in 131 national cemeteries are historic headstones and markers which should be protected and treasured. Also, today's new headstone will be tomorrow's historic grave marker.

Headstone cleaning must take into consideration the operational standards set forth by the National Cemetery Administration. [1] The following standards are among those designated for headstones:

- Headstones, markers, and niche covers are clean, free of debris and objectionable accumulations.

- Headstones, markers, and niche covers are not damaged by cemetery operations (e.g., interment, grounds maintenance, headstone, marker, niche cover, maintenance, and facility maintenance operations).

Maintenance practices must have an eye toward the future. Many cleaning methods may be able to remove soiling from headstones. Some will be more effective than others. But the long-term effects must also be considered. Anyone developing a cleaning method must look at the soiling agent to be removed, the potential threats caused by the soiling, and the possible unintended results of cleaning.

[1] This document, released for distribution on May 23, 2011, is part of a forthcoming report of research undertaken by the National Park Service's National Center for Preservation Technology and Training for the Department of Veterans Affairs National Cemetery Administration.