

HERITAGE BULLETIN

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Tips, Ideas & More to Help Preserve Oregon's Heritage

FUNERARY FOLK ART AND THE CONCRETE ALTERNATIVE

JULY 2015

Funerary Folk Art Concrete Gravestones The Preservationist's Dilemma

Historic cemeteries are museums that chronicle the varied stages of memorialization. Monuments in marble, granite, limestone and sandstone mingle in a dominating display of the stone cutter's craft that shows the ever-changing taste in shape, symbolism and message. From the simple to the elaborate, gravestones reflect the impact of social and cultural customs in the expression of emotions related to the end of life.



Often hidden among the more prominent monuments, we find an eclectic collection of more humble markers that often reflect another reality. Economic conditions in times of hardship have given us an array of grave markers that are both fascinating and fragile. Tediiously hand-carved wooden markers still survive in some climates. Sheets of metal ranging from copper to steel with names and dates punched in with an awl, a nail or a knife, mark the grave with a form of metal piercing that ranges from crude to quite ornamental. Native stones, some painted, others hand-engraved, hide their history beneath a blanket of lichens or moss. Glazed terracotta markers are more rare, but contribute their uniqueness to the palette. Copper nails driven in a block of wood spell out the names and dates, sometimes of whole families.

Concrete is the most common alternative to the ubiquitous carved stone memorialization. As concrete gained respectability as a building material in the late nineteenth century and into the first part of the twentieth century, the stigma attached to the concrete grave markers diminished. Concrete actually gained respectability through the cast Tree Stones of the Woodmen of the World available until about 1920. However, in historic cemeteries across the country, we find a variety of humbler, home-made concrete gravestones. These markers were made by grieving relatives at times when families could not afford commercially produced stones. Often placed as a temporary marker until the improving economy allowed for a better stone, the concrete became permanent either by design or neglect.



All of these non-commercial alternatives now comprise what has become known as funerary folk art. They correspond to periods of economic distress, from the Panic of 1893, which saw the collapse of some 500 banks and the failure of thousands of companies, through the World War I pressures on the economy, to the years of the Great Depression. Epidemics, such as the influenza pandemic of 1918, combined with the economic troubles to produce a surge of inexpensive folk alternatives for grave markers. Through the first half of the twentieth century, the economic history of the country can be traced by reading the death dates on concrete gravestones.



All of these efforts to honor the deceased in hard times share a common quality, in that they do not endure. Wood rots. Metal corrodes. Rocks weather. Terracotta shatters. Concrete both delaminates and breaks. The temporary quality of the materials used in the folk art expression of grief presents a unique series of challenges to those who would preserve the historic cemeteries across the country, and the historic ambiance and artifacts they contain. Preservation has not always been a consideration, and many of the vulnerable markers have vanished, either by accident or design. Some have been discarded as unsightly or hazardous as they have deteriorated.

Concrete markers present an intrinsic challenge. Well-mixed concrete has a life expectancy of 75 to 100 years, depending on environmental issues. Some of these markers were made by those who had knowledge and experience as masons. Others were made by well-meaning relatives who did what they thought would endure.



Some who made the concrete markers, especially the upright monuments, reinforced the marker with wire or rebar. Concrete is porous, and water seeps through the material to the metal that is meant to strengthen the marker, causing it to rust and swell. This fractures the monument or marker, hastening its deterioration. Herein lies the preservationist's dilemma. The deteriorated marker, sometimes lettered with a twig or fingertip, is an artifact of another era, and represents the outpouring of someone's emotions at a time of parting. It may also represent a hazard to some unwary visitor.



A survey of historic cemeteries reveals the difference skill makes. Deeply-pressed letters and numbers remain legible longer, but will still erode into blankness over time. Shallow lettering can be gone within a decade or two. Concrete mixed with too much water for ease of pouring hardens, but is weak. It breaks under relatively little pressure, and the surface delaminates, or flakes away through cycles of summer heat and winter cold. Concrete mixed with too much water forms a soupy screed on the surface that lacks structural integrity when it dries. The imprint of the letters forms weak voids in the pasty surface that crumble easily even after the concrete has cured.

Repair of these markers and monuments is impractical. The pieces of a flat marker, if it is still legible, could be set in a concrete wrap, but that would deteriorate over time. Flat concrete markers erased by the elements have a story they cannot tell, although their very existence hints at their message. Crumbling upright monuments could be patched, but the patch would not blend in with the vintage concrete, and may not be compatible with the old material. The patch would not solve the structural issue causing the concrete to fracture. Sealing the concrete would trap moisture, and that would hasten deterioration.

Each example of funerary folk art represents unique preservation and conservation challenges. Indeed the folk memorialization represents an emerging segment in the preservation of our historic cemeteries. The first and most important step is one of education. Amateurs in the field of cemetery preservation often do not recognize the significance of the relics. Professionals in the effort are challenged by the many varied forces that must be countered to preserve what remains, and how to incorporate an esthetically acceptable companion marker to record the vanishing history on the folk marker. If preservationists and the general population can, through education, grasp the historic, artistic, personal and cultural significance of these markers, then perhaps the artifacts will continue to cause the cemetery tourist to pause and consider the realities of the past that forced such utilitarian thrift.

**The Concrete Alternative
Marking Unmarked Graves**

Historic cemeteries comprise our most extensive museums, holding more history, more stories, more research resources and more artifacts than our museum



buildings and archives contain. They are also at greater risk of loss, due to their exposure to destructive forces of the elements, time and vandalism. Preservation of these resources does not end with

restoration of what remains, documentation in records, maps and photographs, and measures to slow inevitable deterioration.

During the careful labor of reclaiming or restoring an historic cemetery, we inevitably find not only unstable, toppled or broken monuments, but also many sites that

are obviously occupied graves with nothing to indicate who rests there. Careful documentation of the site must include an unobtrusive, lasting identification on location. This step in the preservation process restores both the historic significance of the site and the dignity of identification to the deceased.

A survey of an historic cemetery shows the variety of materials that have been used in memorialization over the decades, and the durability of each. Memorials of marble, granite, iron, bronze, limestone, sandstone, fieldstone, wood and concrete employed over the years record by their condition the deteriorating impact of the environment.

The most durable materials are also the most expensive. With the limited finances available for the preservation of the historic cemeteries, the humble concrete marker is the default choice for documentation. With careful attention to detail in the process of making a concrete grave marker (the key to durability), preservationists or volunteers can produce serviceable markers that will, in most environments, be legible for a century, perhaps more.

Choose a marker size you will use consistently in the cemetery. A 2 x 4 frame with inside dimensions of 12 x 24 inches, fastened with screws at the corners for ease of removal, will give a marker with structural strength as well as adequate space for biographical information. This size will also accommodate an 80 pound sack of mortar mix with little waste.

For those who choose to use packaged mortar mix, choose Sakrete Type S High Strength Mortar Mix. It is designated for exposed, at-grade and sub-grade applications, and resists harsh soil and weather impacts. The chief causes of concrete failure through spalling, flaking and delamination are freeze-thaw cycles, alkali-silica reaction (a challenge in low-rainfall areas with pedocal soils), and sulfate attack, most associated with moss control efforts. These mechanical and chemical issues are all related to water and the nature of concrete. No matter how hard, concrete is porous. Whether it takes minutes or months, liquids and vapors percolate through concrete. The biggest key to durability is the reduction of permeability.



The commercial choice is Type S mortar mix. To reduce permeability in self-mixed mortar, substitute one measure of fly ash for one measure of Portland cement in the mix. This also adds strength.

Gather all needed materials: the frame, mortar mix, mixing tub and shovel, measured water as directed, a bucket of washing water and cleaning brush, concrete finishing trowel and edger, if desired. Have a short length of 2 x 4 a little shorter than the width of the frame, and a rubber mallet handy, if you do not have a vibrating table. Rubber gloves, a dust mask and eye protection are a must. The dust will fly, and is an irritant to the skin, the eyes and the respiratory system.

Write out in large print the exact spelling and dates to be stamped in the concrete. If you have multiple alphabet stamp sets, lay out, in order, the stamps you will use. When stamping the letters and numbers, check twice, stamp once. Mistakes are hard to correct neatly, so check again before you stamp.

Mortar is designed to adhere, so the frame has to be prepared with a release layer. A heavy coat of linseed oil will fill the pores of the wood. Once that is soaked in and dry, an even coat of cooking oil from a spray can will keep the mortar from sticking to the frame.

In mixing the mortar, it is absolutely essential that the water be measured exactly. A stiff mixture, about the consistency of thick peanut butter will give the best result. If the mixture is thin enough to pour, the surface will not take clean impressions of the letters, will "bleed" water into the impressions, and erode the edges of the impressions. The structure will be weak and porous, and can quickly fail when exposed to the extremes of the elements.

When the mortar is thoroughly mixed so there are no pockets of dry material, gather a double handful into a heap in the tub, and pat it into a cone shape. (Rubber gloves, remember?) If it holds its shape, it is ready. Scoop it into the frame, tamping it into the corners as you fill it to be sure there are no empty spaces. When the frame is full, use the short length of 2 x 4 to tamp the mortar vigorously into place, concentrating on the inside edges

and the corners. Use the rubber mallet on the 2 x 4. The goal is to eliminate any remaining voids. Top off the frame with any needed mortar, level and screed to release excess moisture. Trowel from edge to edge, moving in straight lines in each direction. If you are beading the edge, run the tool around the inside edge of the frame to give a smooth rounded edge, then trowel the surface smooth again, if needed.

Once the surface is prepared, you will have half an hour to forty-five minutes to do the stamping. (Using warm water to mix the mortar shortens the workability time frame of the mortar.) Use a straight edge to align the letters. If you have laid out the letters in order, you could work from the center of the line, stamping forward and backward from that point to achieve a centered layout. Remember to double check the order and position of each letter or number before pressing it into the mortar. Dipping the stamp in clean water or a quick squirt of cooking oil will improve the release of the stamp from the surface, giving a cleaner impression. Be sure to clean the stamps with clean water and a brush after each impression.

When the inscription is complete, tent the form to retain moisture while the concrete cures for two or three days. The marker will dry later. With concrete, curing and drying are not the same thing. The chemical reaction of moist curing gives strength to the finished product. Keep it covered during the curing time. Then remove the screws from the corners of the frame, and gently pull the 2 x 4s from the marker.

At this point, any rough sides can be gently smoothed with a brick, pumice block or rough sandpaper. Then, turn the marker on edge in a cool, shady area, and allow it to dry for a week to ten days before placing it on the grave. Once in place, it will continue to cure and dry, reaching its full strength within about a month.

The rustic appearance that results from slight imperfections in the placement of the letters or the final troweling blends more readily into the historic ambiance of the cemetery, and at roughly ten dollars invested in each marker, the mortar memorial is worth consideration for the preservationist's project.



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