

Tales from Municipal Cemeteries

Many Ohio cities manage cemeteries. In land-locked Upper Arlington, land is at a premium, and there are no large cemeteries. However, the City is home to three small historic cemeteries. Under Ohio law, abandoned cemeteries are the responsibility of the surrounding government jurisdiction, so the City has inherited responsibility for two historic graveyards (and we help the gas station that owns the third from time to time).

One parcel is the eternal resting place for only one individual, Bill Moose, the last member of the Wyandot tribe in central Ohio. The acreage around his grave is now a City park. The pyramidal stone monument and grave were overgrown and in disrepair for many years. The grave area is now landscaped with ornamental trees and prairie-inspired perennials, with benches and a kiosk nearby. The grave was consecrated in a Native American ceremony following the restoration. As cemeteries go, it's now an easy one to manage.

The City's other cemetery is a small parcel sandwiched between a school and residential properties. It was overrun with Asian honeysuckle and other brush when rehabilitation began. It's now turf with a few native trees scattered about. We have avoided any tree planting or stump removal here, as this cemetery came with no records, and we believe there are numerous unmarked graves. Many of the old headstones are weathered, damaged, or in dubious locations, so nobody on the staff is anxious to do any digging. This means that stumps abutting headstones are treated to prevent resprouting, and then left to decay. The ash trees that succumb soon to Emerald Ash Borer will result in a new batch of stumps that will be left to quietly rot—the standard operating procedure in cemeteries.

—Steve Cothrel, Superintendent of Parks and Forestry, Upper Arlington, Ohio

Most of my experience with trees in cemeteries comes from two of our historic cemeteries in Baton Rouge, Louisiana, where the tree problems have been inherited by virtue of age and years of relative neglect. In one case, my office was responsible for a renovation project. The other is an ongoing problem.

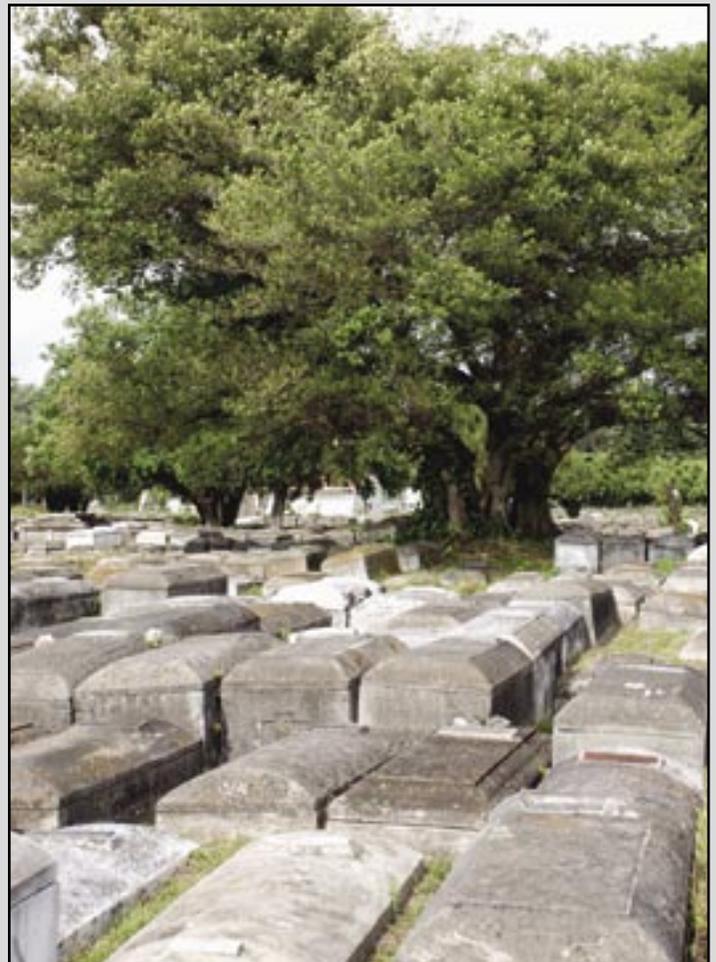
Historic Highland Cemetery is the oldest public cemetery in Baton Rouge, dating from the late 1700s. It exists in the midst of a residential neighborhood just a block from the Louisiana State University campus. Highland Cemetery contains the gravesites of many of our community's original founding families.

Several years ago we undertook a total renovation of the site, which had been neglected since the 1920s. A great many volunteer trees had developed, some of which were quite mature, and many of which were causing problems with the old brick walls

and some of the grave markers, monuments, and above-ground vaults (which are quite common in Louisiana cemeteries due to the high water tables). Our only recourse was to undertake selective removals for some of the worst offenders and to root prune other, younger trees. The root pruning was quite successful, as we saw no appreciable tree damage or loss.

Highland Cemetery is now managed by a private non-profit trust. We work with them occasionally to maintain the trees and developed a master landscape plan for the site which has been closely followed by the trustees.

Sweet Olive Cemetery, on the other hand, is Baton Rouge's oldest African American cemetery. It, too, was long neglected and, for the most part remains so. It suffers from extreme overcrowding and many large, post-mature volunteer trees which are very difficult to access, except by foot.



Lincoln Memorial Park in Miami, Florida • Photo by Jeff Shimonski

A couple of years ago, as an Arbor Day event, I organized a volunteer tree work day that saw participation of several local tree companies, our local utility company, and several of their contractors. We had about 30 people spend a full weekend removing storm-damaged and hazardous trees and doing extensive pruning.

Debris removal was extraordinarily difficult. All brush had to be hauled out by hand through a labyrinth of old tombs, many only 12-18 inches (30 to 46 cm) apart. We enlisted a crew of prisoners from a nearby state prison, who hauled the brush and manageable wood to our chippers, which waited at the cemetery's only access drive.

The lessons I learned from these two cemeteries are that, like any public space, cemeteries really need to have ongoing, managed tree care. Master planning and regular maintenance can circumvent many of the difficulties we faced on these jobs.

—*Steve Shurtz, Urban Forestry & Landscape Manager, City of Baton Rouge, Louisiana*

In 2006, the City of Cincinnati was ordered by the Hamilton County Common Pleas Court to assume the maintenance and responsibility of Wesleyan Cemetery. The cemetery lies in the Northside Community within the City. Established by the Methodist Church in 1843, Wesleyan Cemetery is a 25-acre



Above-ground vaults and tree roots in competition for space
Photo by Jeff Shimonski

(10-ha) cemetery that contains about 17,000 graves, including those of veterans of the Revolutionary and Civil Wars.

The most recent owner of the cemetery was Wesleyan Cemetery Inc., which became insolvent in 2002 when its trustee went to prison for stealing all of its assets. From then until the City took it over in 2006, the only maintenance within the cemetery was provided by volunteers through the Friends of Wesleyan (FOW). While volunteers can mow grass and perform some maintenance chores, many of the large trees on the property had become hazardous.

The 2006 legal decision handed down by the Court described the condition of the cemetery: "It has become an overgrown eyesore, as well as a nuisance to its neighbors." The legal brief filed by the FOW stated, "Groundhogs and other rodents ran rampant, causing graves to collapse on themselves, leaving gaping holes in the earth," and "Grave markers were left in piles and left random, and to this day it is unknown where the bodies are that match these markers." There are many more gruesome examples that I could list but I think I am making my point—the cemetery truly resembled something from a Steven King novel.

The City manager asked Parks to put together a restoration plan to address the horrors at the cemetery. The plan budget included funds for hazard tree removal as the number one priority. All trees were inventoried using GIS with data collected for species, DBH, and condition.

We met with the FOW to discuss our maintenance plan and to get input on desired outcomes. The FOW were enthusiastic about the restoration plan and set an ambitious goal of hosting a community service at the cemetery on Memorial Day of the same year.

We marked the twenty most hazardous trees and scheduled them for removal. Then, we cleared vines and vegetation off of fences to allow visibility into the cemetery to deter crime. Next came stump removal, filling subsided graves, tree pruning, tree replacement, and fence repairs.

Park tree crews performed the tree removals, taking special care so that grave markers were not damaged. Tree service contractors did the fence clearing, tree pruning, and stump removal. A fencing contractor repaired the fence, and volunteers gave over 2,000 labor hours by loading firewood, leveling stump grinding piles, filling subsided graves with soil, cataloging and securing loose grave markers, doing general leaf removal and cleanup, and most importantly, planting 45 replacement trees and beautifying the entrance with perennials and flower beds.

We spent two years restoring the cemetery and ended up removing a total of 35 large shade trees and replanting about 60 new ones. The experience was positive, especially working with the FOW and volunteers. At times the volunteer work was creepy, such as filling in graves, but we made it fun by having scavenger hunts to find the grave of Frankenstein (there is a Mr. and Mrs. Frankenstein buried at Wesleyan) and telling ghost stories.

—*Dave Gamstetter, Supervisor of Urban Forestry, Cincinnati Park Board, Cincinnati, Ohio*

The City of Coquitlam is a community of about 125,000 located in the Metro Vancouver area of British Columbia, Canada. The City owns and operates Robinson Memorial Park Cemetery, dedicated in 1935, with burials beginning in 1937. The 8.5-acre (3.44-ha) property was almost entirely forested when it was dedicated, and the development of the cemetery began with the clearing of almost half the site to facilitate a traditional lawn cemetery.

For the first sixty years, the cemetery operated largely as a lawn cemetery with primarily full burials. A handful of trees were planted in the late 1960s and early 1970s by forward thinking staff. Since that time, there have been some additional tree planting efforts in this area of the cemetery that are now starting to redefine and beautify what was a barren landscape.

In 1996, the City declared that the cemetery was full and undertook a public consultation process to determine its future. There was serious consideration given to turning the cemetery over to a private operator, but in the end, City Council decided to maintain what was Robinson Memorial Cemetery and rename it Robinson Memorial Park Cemetery. The addition of "Park" in the name was intended to reflect the fact that the site is zoned as a park and to highlight the new direction for the property. The remaining 4 acres (1.62 ha) of forest on the site was to be split between a 1.5-acre (.61-ha) memorial forest to be left intact and not to be used for burials, while a landscape architecture firm was hired to design the remaining 2.5 acres (1.01 ha) as a park setting where a range of burial options would be available.

The result of these decisions is a park that is enjoyed by the friends and families of those laid to rest on the site, as well as residents that simply enjoy the beautiful and tranquil park setting. New offerings that have proven increasingly popular are boulders and monuments installed at the base of trees.

The landscape plan led to the effective retention of many of the mature trees, primarily western redcedar (*Thuja plicata*) and Douglas-fir (*Pseudotsuga menziesii*). People can purchase a small plot at the base of these trees (four available per tree) and then have a custom boulder or monument designed to be installed at the base of the tree with an urn or ashes buried below the monument. The trees also benefit from maintained tree wells and/or landscaped areas associated with these installations that protect them from mower damage and assist with moisture retention. A staff arborist works with the cemetery staff on these burials when the installation of the monument may potentially impact the root system of the tree to ensure there will be no negative impacts to tree health.

By working with existing trees and being strategic about new plantings, cities may find that not only can a significant number of trees be accommodated in a cemetery; trees can provide new burial options, while enhancing both the landscape and the bottom line.

—Lanny Englund, Urban Forestry and Parks Services Manager, City of Coquitlam, British Columbia

Some Noteworthy Trees of Spring Grove Cemetery and Arboretum • Photos by Wendi Van Buren



Swamp White Oak (*Quercus bicolor*)



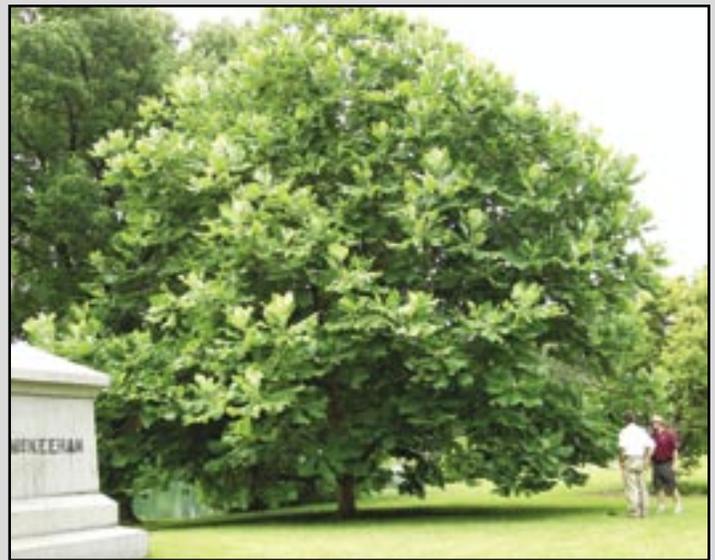
Ohio State Champion Hardy Rubber Tree (*Eucommia ulmoides*)



Ginkgo (*Ginkgo biloba*)



American Elm (*Ulmus americana*)



Bigleaf Magnolia (*Magnolia macrophylla*)

So your supervisor has just told you that you're the new cemetery supervisor. No problem, right? The first thing to understand is what you are selling. In Lansing we are selling the right to bury someone in a very particular location and for them to stay there in perpetuity. If no one is buried in the plot, we sell the buyer the right to determine who will be buried in the plot. How many persons may be buried on a particular burial plot? In our situation the answer is two. In our community one person can be buried in a casket and one as cremated remains ("cremains"); alternatively, both may be interred as cremains. We have congregations and organizations that purchase one hundred plots at a time to be used by their members.

All three of our cemeteries are laid out using surveying and the installation of plot markers and section markers. These are mounted at the soil surface but are quickly buried by grass and soil. Your best friend in finding plots is a metal detector.

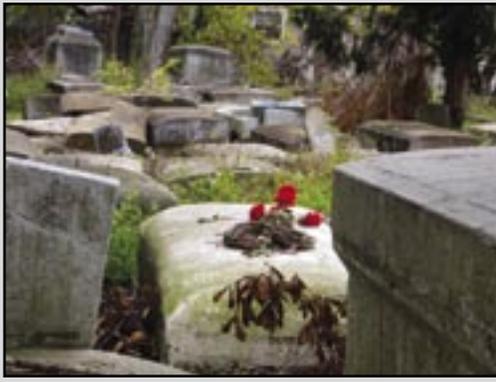
We pay close attention to how plots are laid out because of religious beliefs and cultural customs. What do I mean? For example, many Christians want to be buried with their feet to the east so they can see the next coming, which they believe will be from the east. Many people from Southeast Asia want to be buried on high ground. Many people who follow the Islamic faith want to be buried north and south with the body situated so they face east.

There are many other pieces of knowledge a cemetery manager needs to know. Some people believe their body should be in contact with the earth; in that case, they are placed in the ground and the concrete vault is placed over them. Others wish to have visitors to the graves place stones next to the monument stone. These stones don't have to be boulders, they can be pebbles. Some religious groups don't want anyone of any other faith buried adjacent to one of their members. This can get tricky.

How to bury someone should be the subject of an article all by itself. How deep should a grave be? It doesn't need to be 6 feet. What do you do in the winter when the soil is frozen harder than any rock known to man? How about a big, upside down propane barbeque to thaw the soil?



Katsura Tree (*Cercidiphyllum japonicum*)



Sweet Olive, Baton Rouge's oldest African American cemetery • Photo by Chris White

Filling a grave is an art form, particularly those dug during the northern winters. I do advise using sand as a fill material and that it be stored under a tarp so it doesn't freeze quite so hard. Every spring look forward to putting even more material in the winter graves. There is no way to get good fill compaction when it's snowing. Even during the warm months it takes several visits to the burial site to get the grave filled, settled, and seeded.

There are many small bits of knowledge needed to effectively run a cemetery and just a few truly big pieces of knowledge. If you know nothing else, know this: your cemetery must look absolutely great for Memorial Day.

—*Paul Dykema, Manager of Forestry and Grounds, Lansing, Michigan*

A little over a decade ago, my father was interred in the Houston National Cemetery in Texas. At the time this was a fairly new cemetery and there were still vast expanses of lawn. My family and I thought it was great that he had been interred near one of the few trees in the immediate area. Not seven years later, my brother was interred in another section of the 412-acre (167-ha) cemetery and during my semi-annual visits, I began to notice the potential for tree root conflicts with gravestones.

I know there are drainage problems at this cemetery because many of the urns (including my father's) have been reinterred over time because of subsidence issues. This leads me to believe that the trees will have very shallow root systems because of the high water table and the roots will always be pushing nearby gravestones, and possibly urns, out of the ground. This seems to be the case with the tree and gravestones near my father's grave.

Last year I was driving through one of the older areas of Miami and passed a cemetery with above-ground vaults. The cemetery appeared quite old with very large trees coexisting somehow with the densely packed vaults. A few weeks later I received permission to enter and photograph inside Lincoln Memorial Park, a historic black cemetery first opened in 1924.

The photograph of Lincoln Memorial that accompanies this article shows how crowded the 538 vaults are on this site. To walk across the cemetery one often must pass on top of the vaults. Land here is at an absolute premium, with no space for new burial vaults. The trees have begun to displace some of the vaults and may eventually be removed. The right tree in the right place takes on new meaning in cemeteries.

—*Jeff Shimonski, Director of Horticulture, Jungle Island, Miami, Florida*

The Spring Grove Cemetery and Arboretum is a National Historic Landmark, with trees from all over the world planted across 733 acres (166 ha). These trees are a precious resource for the greater Cincinnati community and visitors from out of the area. When the interment crew prepares a site for burial, the horticulture team ensures proper pruning of limbs and roots in the vicinity of the grave.



Sweet Olive Cemetery • Photo by Chris White



Baton Rouge Cemetery • Photo by Chris White

It is not uncommon to find a burial plot that was sold when the adjacent oak tree was 2-inch caliper; forty years later, we need to come in and excavate that burial site. Clean pruning cuts on any roots damaged by the backhoe are crucial. Limbs that would impede the pallbearers on the day of the service are tied back, if possible. Otherwise, light pruning is performed to allow access to the site. On average, we engage in such pruning five times a week, just prior to the burial service.

Another challenge facing the cemetery is the countless vines on our trees. Historically, the lot owners were able to purchase “perpetual care” groundcover for loved ones’ burial spaces. Initially, in the 1800s, English ivy (*Hedera helix*) was planted; purple-leaf wintercreeper (*Euonymus fortunei* ‘Coloratus’) followed as the preferred choice on the grounds. Either or both cover the 17,000 graves that are currently maintained. This is challenging enough, because the vines grew out of bounds years ago.

There are 90-foot (27.43 m) Norway spruces (*Picea abies*) with English ivy all the way to the top. Massive oaks hang ivy like a clothesline, all over the grounds. So for the last two years, the crew has undertaken the task of removing the climbing vines first, to be followed by the prostrate groundcover later. This is so that the amount of viable seed produced by these plants is kept to a minimum, as these vines change from vegetative to reproductive after going vertical.

About 6,000 labor hours have been spent toward this goal, and we’ve cleaned up 2/3 of the grounds thus far. We cut the vines from the ground to four feet (1.22 m) up the trunk, then apply

Roundup to the cuts. We are very excited with the results so far. We are looking into alternative choices for future groundcovers.

Recently, the Spring Grove Cemetery and Arboretum lost over 500 trees due to the 2007 drought and Hurricane Ike wind damage in 2008. The largest trees and toughest sites are contracted out to local tree companies, while anything that is manageable from the ground we take care of internally. By putting all available staff on tree removal right away, we were able to clean up all of this damage in less than three months. We still run our chipper through the grounds on a weekly basis to take care of any wood as it accumulates.

An interesting observation from the Hurricane Ike severe wind damage: of the forty mature oaks lost that day, only one was a white oak (*Quercus alba*). The other thirty-nine were all from the red oak family (and the one white oak that was lost was crushed by a larger red oak.)

An interesting note from the 2007 drought: of the 200 conifers lost, most were mature Norway spruce (*Picea abies*), arborvitae (*Thuja* sp.), and yews (*Taxus* sp.). Some of our most impressive trees remaining were Oriental spruce (*Picea orientalis*), Nordmann fir (*Abies nordmanniana*), Cilician fir (*Abies cilicica*), and all of the trees in the white oak family group. Three years since the drought, we have lost some more red oaks and Norway spruce, but the tough species are still standing tall.

—**Brian M. Heinz, Supervisor of Horticulture, Spring Grove Cemetery and Arboretum, Cincinnati, Ohio** 🍂