

By Marty Benson, OI staff Photography by Frank Oliver, OI staff

ge: 4 hours."

People who do cemetery restoration at any level usually have a story about why.

John "Walt" Walters, a professional at such work for more than 20 years, has more than a few such tales, and those three words are the gist of one.

They're from a broken tombstone he repaired in his early days at his craft.

"Just four hours on Earth but that four hours meant so much to two other people that they erected that memorial," said the man who calls his small business Graveyard Groomer. "I was glad I was able to put that back up for them."

You've probably heard the corny line about "that cemetery" being so popular that people are dying to get into it. But once gravestones have been around for decades, and family and friends move or die themselves, getting the living to come inside the gates to maintain individual graves can be challenging.

Even though gravestones project permanence, they need to be cared for. Neglect brings faded inscriptions; film-covered, broken or knocked-over stones; or all of the above.

Lapsed cemetery maintenance isn't just a modern problem, says Jeannie Regan-Dinius, who runs the DNR Division of Historic Preservation & Archaeology's cemetery and burial ground registry program. She cites the diary of Calvin Fletcher, a prominent 19th century Indianapolis lawyer, in which he slams the condition of the city cemetery.

"He said the city ought to be ashamed of it," Regan-Dinius said. "So we are no different from our ancestors in how we care for some cemeteries.

"Those who are trying to care for cemeteries now often face longstanding issues."

Sometimes vandalism takes a toll, but mostly it's just a wearing away. But with the proper care, tombstones can stay presentable for centuries.

Benjamin Franklin recognized the importance of such efforts to a country's cultural heritage.

"Show me first the graveyards of a country and I will tell you the true character of the people," Franklin once said.

Walters says as he works, he senses that place's meaning.

"Think about how many tears have been shed and how many prayers have been said right here where I'm at," he said. "That's the importance of restoring these old places."

Properly cared-for old graveyards are tourist attractions to some people, even when they have no emotional connection. Regan-Dinius says tombstones can be the only record of an individual's existence, and graveyards are outdoor museums with some of the finest artwork around.

(Left) Green Hill Cemetery in Bedford is home to unique and beautiful gravestones. Many are carved from native limestone. (Right) Graveyard Groomer business owner John "Walt" Walters has been restoring headstones and cemeteries for more than 20 years.



Interest in cemetery care appears to be growing. Having family history on the Internet has helped. Studying genealogy no longer requires a trip to the library but it often leads to a drive to a cemetery. Once a visitor sees a relative's tombstone in poor condition, that person often wants to help or get help.

"Our job at DNR is trying to get people to understand what the responsibilities are, and what you can and can't do," Regan-Dinius said.

The general cemetery-care mantra is similar to one health-care workers are taught—"first, do no harm." Considering that cemetery restorers are dealing with rock, a symbol of strength since at least Biblical times, that reminder might seem ridiculous. But ...

"Yes, it's a stone that was deep in the Earth," said Jason Church, materials conservator for the National Center for Preservation Technology and Training, which is part of the National Park Service. "It got blasted out, it got carried somewhere, now it's weathering all over again ... It's being exposed to rain and sun, things it was never exposed to before."

That's after being beaten on with hammer and chisel, noved, and reset.

"So they've had a rough life, and we really need to respect that," Church said.

But there are disagreements over translating respect into proper maintenance and what may do more damage than good.

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(Above) Lafayette citizens restore Greenbush Cemetery, a pioneer cemetery in Fairfield Township in Tippecanoe County. Township trustee Julie Roush, who oversees the graveyard, leads the work. (Below) On Indianapolis' near southside, eight Jewish congregations buried their loved ones in a distinct design of densely oriented graves. (Opposite page) While this gravestone may appear damaged beyond repair, cemetery advocates know it can be fixed.



CLEANING

Tombstones and gravestones are one and the same. In Indiana, they are usually made of limestone, marble or granite (listed from most porous to least). Unless regularly cleaned, each will attract an ever-growing mixture of pollutants and organic matter that nature will not get rid of.

You might think removing that film is a simple case of spray-and-wipe. But the question is what to spray and what to wipe—or brush—with. Regan-Dinius says no definitive answer exists, even though many claim one.

Options involve the old, slow but effective use of ammonia, water, a natural bristle brush and elbow grease. Then there are a few fairly new detergents that include a biocide. Then there is a powered nylon brush.

The debate over which is best can be heated. Few things arouse emotions more than how a loved one is cared for, dead or alive. The DNR has been criticized for not taking a stand. State law does not prescribe any methods for cemetery preservation, restoration, or care of stones.

Walters, who does presentations with Regan-Dinius on the subject, says it's no mystery why people like the chemical methods. But he doesn't.

"Right now it's the big rage because it's the easiest thing to do," Walters said. "You spray it on, and it kills all of that biological growth and eats it all up."

He says the geologists he's talked with expressed concern about long-term effects on the stone.

"They said 'you should never put anything on a porous stone that you are not going to thoroughly rinse out,' and how do you know you have thoroughly rinsed it out?

"It's just not a good idea to infiltrate a chemical into a porous stone," Walters said. "I show examples of using biocides at workshops and say, myself, I will not do it."

When a stone has gathered a sufficient amount of film to warrant it, Walters, who specializes in pioneer cemeteries, uses a nylon brush inserted into a power drill for cleaning. He acknowledges the method's critics, but he says it's necessary, effective and safe, done professionally.

"You can't take a Q-tip and a craft stick and clean off 150 years of growth," Walters said. "You have to get more aggressive with it."

Church, who favors use of detergents with biocides when necessary and has researched their effect on tombstones for the U.S. Department of Veterans Affairs, says to stay away from all mechanical cleaning.

"It's just too harsh," he said. "You should never use any brush on a tombstone unless it is soft enough that you would use it to clean your car's hood."

He says that safely and effectively removing biological film requires a biocide, which will penetrate and get to the roots of the plant material, which reach into the pores. He says aggressive brushing works and may produce a better appearance than biocides in the short term, but it's not worth the long-term damage.

"It absolutely wears the stone," he said. "That's the only way you are cleaning. You are wearing away the surface.

"Any cleaning that removes any material, you are just increasing the wear and tear and the deterioration of that stone."

Greenbush Cemetery, a pioneer cemetery in Lafayette's Fairfield Township, has used all of the methods. Julie Roush, the township trustee who oversees the 19th century graveyard, says there is no perfect method, but she vastly prefers



the results of the powered nylon brush, done by a professional like Walters, whom she's hired for the last three years.

She says it will take a lot longer than that to settle the debate. "I don't think it's ever going to be solved, which method is better, unless you are around for 100 years and can do a test, saying 'this is what we've always done on this one, and this is what was always done on another, and which one held up better," Roush said. "I think people should do their own research

Most important, she says, "I will never give someone who does not know how to use it properly, the nylon brush and drill. Everyone else uses the hand brush."

Both Walters and Church agree that a soft bristle handbrush, water and ammonia is a safe method for general, lowrisk cleaning.

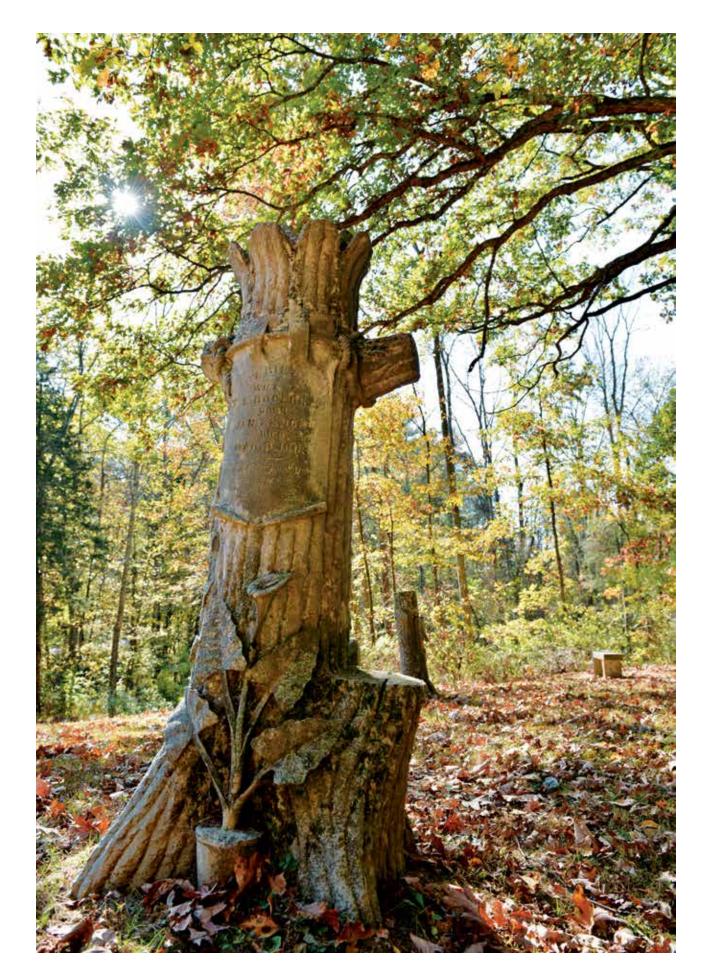
"What I recommend is a case-by-case basis," Church said. "It totally depends on what stone you have and what you are trying to get off. There are plenty of cases where just water and soft bristle brush will do it."

FARMING, MOWING AND TREES

and decide for themselves."

Walters' interest in working on tombstones blossomed when he was mowing cemeteries for Fayette County and noticed broken stones in some of the county's many pioneer cemeteries to which he was assigned.

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Gravestones have faced threats ever since setting them became a custom. Until a change in Indiana law in 2000, agriculture was one nemesis. Farmers could legally move tombstones as long as they didn't disturb human remains. They could also graze livestock through cemeteries on their land.

Today, a gravestone's major foe can be high-volume mowing. "Essentially, our lawnmowers are sawing tombstones right in two," Walters said.

This can be especially true in pioneer cemeteries, which originally were made to be tended by hand and grazing goats or sheep. Now, mowers as wide as 60 inches are often used. Damage is rarely intentional but unless those doing the work adjust, it's almost inevitable, given the tight spaces.

Walters says that at cemeteries—both pioneer and modern—that have not switched to push-mower and hand maintenance when close to gravestones, he can see where mower decks rub against stones in the same spot, every mow. The deck also hits the same spot on the opposite side of the stone on the mower's next pass, creating a double flaw.

Using chemical weed-killer can partially solve the mower problem. But if the stones are limestone, the acid in weed-killer will eat away at the stone. The same is true with marble, to a lesser degree. Modern granite, Walters says, can withstand such acid.

No matter what substance marks the grave, haphazard use of weed-killer can cause other damage.

"If you kill everything around a tombstone and all the grass around it, what's going to hold it up?" Walters said. "So now you've got pounding rains, and you get a big old moat. It fills up with water and in winter you get the freeze and thaw effect."

Using a weed whacker is a good alternative, Walters says, and only needs to be done every two or three mows.

But in some old, neglected cemeteries, plenty of work needs to be done before it's safe to mow once in any fashion.

In 2010, Fairfield Township in Lafayette took over Greenbush Cemetery from the private board that had been tasked with its care for almost 200 years. Just walking around its grounds was dangerous.

Multiple ash trees on the 10 acres had fallen, were dead or dying. Other trees had limbs that had been pummeled by frequent high winds and were ready to fall. Miraculously, none had fallen on tombstones.

Cutting and pruning required tools, but Roush had none. Not even a shovel had been left behind in the cemetery. Roush scrounged for help, and found plenty.

"We have had so much support in my community," Roush said. "So many businesses have donated and given us tools."

More than two dozen trees have been removed. About 80 still need to be heavily pruned.

Greenbush was incorporated in 1843, but Roush says there are gravestones from as early as 1820. The most recent tombstone is from 2009. Greenbush forms an L around an old city cemetery. Combined, they reflect the community's story.

"It has so much history," Roush said. "It shows the cholera epidemic. The founder of Lafayette is buried there. Senators are buried there. Civil War soldiers from both sides are buried there."

After the trees are taken care of, the next step is to address the large population of groundhogs. Then plans get bigger.

(Left) Yellowwood State Forest is home to a small cemetery. This tree trunk marker symbolizes the brevity of life.



Where are they?

By law, the DHPA maintains a directory of every cemetery in Indiana.

To find one, go to dnr.IN.gov/historic/4505. htm, which will take you to the State Historic Architectural and Archaeological Research Database, known as SHAARD for short.

To learn more about cemeteries and cemetery preservation, see dnr.IN.gov/historic/3748.htm. □

Greenbush was created as a park-like cemetery. Roush's ultimate goal is to restore that atmosphere.

"We are going beyond what a trustee is supposed to do," she said. "It's because it's a historic landmark and it should be restored and transformed into a community destination.

PUZZLE PIECES

Putting broken tombstones back together is like most crafts. Almost anyone can do it ... a little. Re-assembling them properly is meticulous, artistic work.

Research is Walters' first step when determining how to fix fractured stones. At first, getting answers was harder than he thought.

"I started going to libraries, thinking I'd find a book, 'Tombstone Repair for Dummies' or something like that," he said.

Hitting dead ends, Walters turned to plain stone. He studied how professionals worked with limestone and marble buildings and statues, and took those methods to the gravevard.

He uses various types of epoxy and mortar, depending on the type of stone. He's revisited places he's repaired years later and says the work tends to last, barring maintenance mistakes or other abuse.

As with cleaning, amateurs can and do mend stones, but need to be careful and take their time.

"There are several epoxies out there but if you stay with one that is made for stone-to-stone bonding, you'll be all right," he said.

Although it sounds counterintuitive, Walters warns against epoxies that boast of forming a bond more resilient than the original stone. The claim may be true, but that kind of strength is not necessarily desirable.

"Say you put that epoxy on a stone that's been broken in two pieces and you fix it and someone puts a size 12 against it and slaps it over and breaks it in a new place because yours held so well," Walters said. "Now you come back and put that epoxy in again in the new place, and say a tree limb falls on it. That's

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(Above) In 1997, Smith Cemetery near Perrysville was dedicated as a state nature preserve. There are more than 30 species of prairie plants throughout the pioneer cemetery. (Below) The Monastery Immaculate Conception and its cemetery of iron crosses is in Ferdinand. The monastery is home to one of the largest communities of Benedictine women in the United States. (Opposite page) DNR workers spray for invasive species at Smith Cemetery Nature Preserve.



another new break. So now you have a stone that's broken in three places from different things happening to it."

Had the epoxy been weaker than the stone, the marker likely would have broken again in the same place.

"You'd much rather have it pop off right where it used to be broken," Walters said. "Then it's nothing to put it back together, instead of having a series of breaks that ruins the look."

When he repairs broken tombstones in pioneer cemeteries, Walters almost always needs to add mortar to fill in gaps after using epoxy. The years have worn many of the edges of the pieces.

"You're not going to get a good fit," Walters said. "The epoxy is going to hold the stone together ... but you've still got that crack. If you don't fill that crack in, water gets in there and does its freezing and thawing, and it will pop apart again."

Walters has combined statue and graveyard repair techniques at Wesley Cemetery in Westport, repairing the memorial marker of Pvt. John Shaw, who was killed in the Spanish American War. In 1965, the marker was vandalized.

"The story is these heathens lassoed him and dragged him off his pedestal so they could steal the stone-carved rifle in his hands," Walters said. "His head was found in a creek bed and they couldn't find all the other parts."

He first saw the damage in 2008.

"I thought man, the only way that's going to stand again would be to use Jahn mortar," he said. "For seven years I wanted to put that statue back together because it's so neat."

A person using such mortar fills in the cracks and builds out to account for missing pieces, then carves down the mortar to look like the original. In order to buy Jahn mortar, a person has to be certified to use it. Walters, at the time, wasn't.

In 2015, having since earned the necessary credential, Walters got a call asking if he wanted to work on the statue. A few years earlier, it had been moved to Ohio for repair that still had yet to be started. The intent was to place the repaired statue in a museum. Walters had a different idea.

"You give me the job, and I'll stand him over his grave," Walters said he told the caller.

He and his wife, Micki, retrieved the statue. Walters worked on it at his shop before returning it to the cemetery, where the statue now stands while he applies the final touches.

PRAIRIE VIEW

When pioneers came to Indiana, 10 to 20 percent of the land was prairie. That land being mostly treeless, it was easier to plow, so the original Hoosiers cultivated most of it. The tree-root-free land also was easier to bury loved ones in.

Graveyard maintenance was done by the simple means mentioned earlier. Those practices not only kept the manmade portions of the cemetery looking good, but also had the unintended effect of keeping trees and other woody plants at bay. This allowed now-rare prairie plants to flourish as the surrounding land was farmed.

The tombstones of most of these cemeteries are of course still around, in varying condition. In most pioneer cemeteries, the native prairie plants are long gone because of modern lawn care. But in a handful, the unintentionally preserved original plants have been intentionally saved and protected.

Pioneer cemeteries, it turns out, are repositories of not only human history but also natural history.

"I'm as much a historical preservationist as I am a nature preservationist," said Tom Swinford, assistant director of the



DNR Division of Nature Preserves. "To me they strengthen each other.

"It's kind of amazing to find spots like these that are time capsules."

Part of the reason these plants can thrive is that even the soil of these places is unique in Indiana. It's never been plowed.

Smith Cemetery in Vermillion County's Highland Township and German Methodist Pioneer Prairie Cemetery in Lake County, both managed by the DNR Nature Preserves, are the state's main examples.

Today, just as in pioneer times, if an area is not managed to remain a prairie, the prairie plants will be overtaken by other plants. The land will eventually become forest, and the state will lose more examples of its rarest plants.

The trick to preventing succession is to get the cemetery preservationists and the prairie-plant preservations to work together, which DNR Nature Preserves tries to do. Some people object to letting what some people consider weeds grow to a gravestone's edge, but many can be convinced it's a sound, desirable practice.

"Some think letting it grow dishonors those who are buried there," said Mike Homoya, a veteran botanist/plant ecologist for DNR Nature Preserves. "We look at it the other way—that they are buried there, and this was the landscape that they lived in and were buried in. It's more authentic."

One of the main ways of removing non-prairie plants from pioneer cemeteries and preventing the spread of less-desirable plants is controlled fire. The effect is to emulate wildfires caused by lightning strikes. At Smith, for instance, a low-intensity prescribed burn is done every spring.

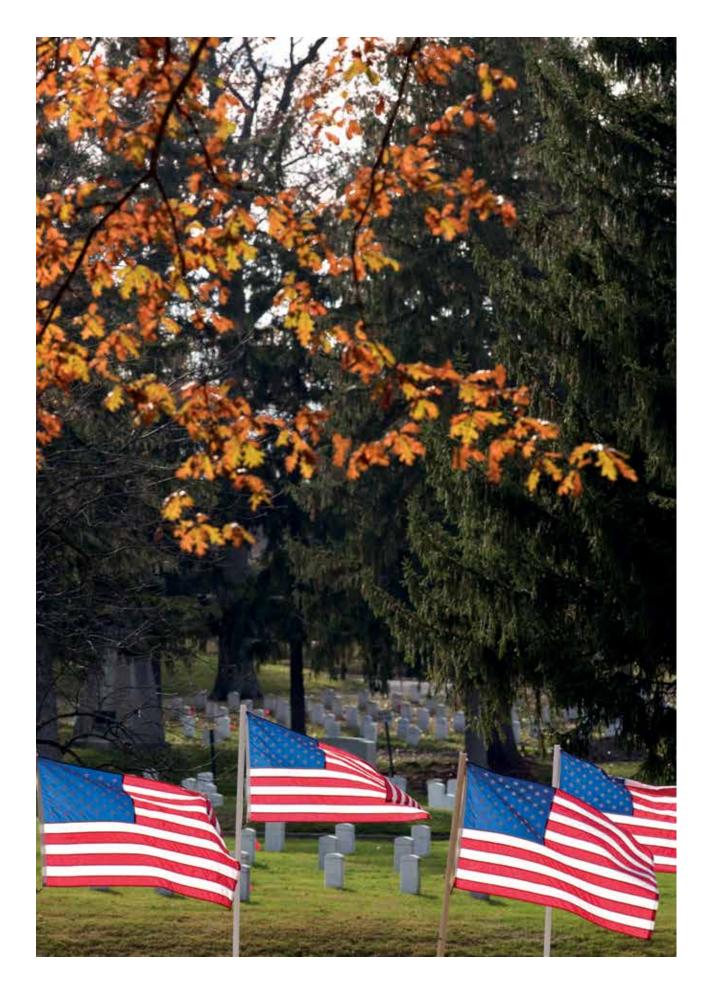
Controlled or not, the imagery of setting flames around an ancestor's final resting place can be controversial.

"A lot of the cemetery preservationists, they don't include or extend preservation to the prairie plants," said Swinford, who works with Regan-Dinius to try to get cemetery advocates to make that connection.

Swinford, who has overseen management of prairie cemeteries throughout his DNR career, says he understands the concerns and tries to address them. Some people are concerned about the tombstones being damaged by fire. Even though there is no definitive proof fire harms gravestones, Nature Preserves staff works to minimize the possibility.

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"We err to the side of caution," he said. "We use firing techniques that are much lower in intensity than for other prescribed burns.

"We burn only during low winds and try to avoid really hot conditions, and in some cases, we wet down the areas around the stones before burning."

DNR Nature Preserves manages two prairie cemeteries. Smith, which covers 1 acre, is one. German Methodist Pioneer Prairie Cemetery, 2.7 acres in Lake County, is the other.

"Both are wonderful places to experience the riot of prairie plants when they are in bloom at the same time," Swinford said. "Mid-summer right into the end of the growing season is the best time."

RELOCATION AND RESTORATION

Pioneer cemeteries that aren't surrounded by prairie are, of course, historic, too. But unless the land around any cemetery is protected, its use of that real estate usually progresses with the times. As the modern world closes in, almost any perception of the intended peaceful setting can vanish.

Take the former Wright-Gentry Cemetery in Lawrence, in northeast Marion County. The graveyard, known to some as Whitesell Cemetery, served as a family burial site from 1832 to 1868.

By the early 2000s, the setting at 8000 Castleton Drive was smack dab in the middle of interstates 69 and 465, a few feet from the highway and cut off from pedestrian access. Per Indiana Department of Transportation (INDOT) statistics, 200,000 vehicles a day passed the graves.

A road expansion was needed, and the cemetery was in the space of the proposed project.

Moving a cemetery for any reason is usually a controversial undertaking. This transfer, however, ended up being a welcome change. It relocated the graves to Indianapolis' Crown Hill Cemetery, where they are now part of that cemetery's pioneer section. Distant traffic can sometimes be faintly heard, but not seen.

Making sure the move was done correctly, in a sensitive manner, required starting about five years before any part of the road construction began.

"First, there was a lot of effort put into making sure we were abiding by all the state laws and regulations with archaeological excavations first and then relocating human remains," said Shaun Miller, an INDOT archaeologist who worked with the project. "We had to get a permit from the Department of Health before we could move the cemetery, and we had to try to identify descendants of people who were buried there and inform them of our intentions, and make sure they were on board."

During the process, a large tent covered the fenced work area so that the human remains unearthed by archaeologists were kept from the public. Media were allowed on site but not in the tent.

"The first objective was to identify grave shafts," Miller said. "There were a lot of unmarked burials. We knew there was a cemetery there but we didn't know how many folks were buried there."

To start, the topsoil needed to be stripped with a backhoe so the workers could see the darker soils that represented the location of

(Left) The Indiana Veterans' Home cemetery in West Lafayette dates to 1896. Burial in the cemetery is limited to veterans and their spouses who resided in the home at the time they died. (Right) Named for its rolling terrain, Green Hill Cemetery is a peaceful final resting place for Bedford's residents.



the grave shafts. After that, they focused on individual grave shafts, carefully digging by hand until they reached the coffin hardware.

"We took meticulous notes, making sure we were getting every piece of coffin, coffin hardware, human remains, everything that was in that grave shaft," Miller said. "All of those were kept together for each individual grave site."

Everything from each grave site was put into new individual concrete vaults that were reburied at Crown Hill. During the excavations, everything was mapped.

"When we reburied, we made sure that person A was next to person B," Miller said. "If there were family members who were buried together at the original cemetery, they were kept together at Crown Hill."

As with a lot of other pioneer cemeteries, some tombstones had been knocked over, some were broken, and there was evidence of vandalism. With the move to Crown Hill, all of that was fixed and is regularly maintained by Crown Hill staff.

Miller said the rededication at Crown Hill felt like a family reunion.

"A lot of these people are distant cousins," he said. "They brought what genealogy information they had to share and learned about their own family history. This project brought a lot of people together who may not have known that they were related in any way."

WORDS TO LIVE BY

Pioneers and some of their modern descendants probably never dreamed of today's emerging popularity of cremation and green methods of burial.

Those movements may reduce the chances you or yours will end up in a cemetery or with a tombstone. For that reason, the epitaph that Walters likes best of the hundreds he's seen may not apply as much as it once did. But the words will have some relevance, no matter if the person lived for four hours, four score years, or much longer.

"Remember me as you pass by.

As you are now, so once was I.

As I am now, so you will be.

Prepare for death and follow me."

Depending on perspective, preserving cemeteries may be "paying it forward" or backward. In either direction, it's worthwhile—as long as you do no harm.

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