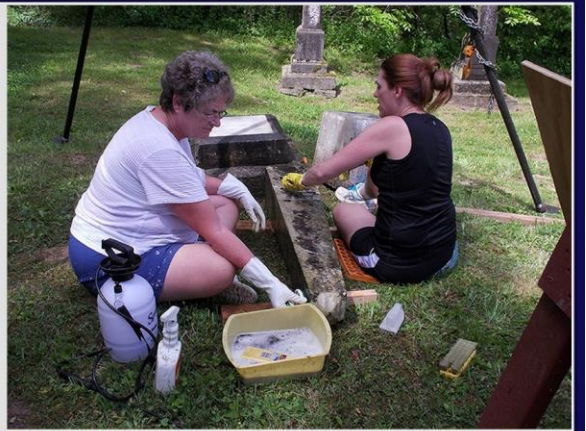


Cleaning

Cleaning tombstones and monuments has become quite popular among many individuals and groups. Some groups do it as part of reading cemeteries to gather historical documentation or as a way to beautify a cemetery. Others are individual descendants doing much the same things. And others take on tombstone cleaning for things like Eagle Scout projects. The following are the best and easiest ways to accomplish this in the most do no harm manner available at this time. You will find more information on harmful cleaning under HARMFUL METHODS...Don't clean with. Make sure your method is not a harmful one. For your safety, please always make sure the tombstone or monument you are working with is sound and doesn't present a danger of falling. And for the sake of the stone, please check for sugaring and delamination so you don't inadvertently damage it further or permanently.

Do No Harm Cleaning Methods



HOW TO PROPERLY CLEAN HEADSTONES AND MARKERS

By CCUS member Susan Dunham of Maine Gravesite Maintenance

Most of us have visited cemeteries with headstones and markers covered with environmental grime and biological growth such as moss, lichens and mold. The grime and dirt can be removed with a proper cleaning, which will avoid causing any harm to the stone. Even though the markers are made of stone, most old markers are incredibly fragile. They suffer from "invisible" stress cracks, delaminating layers of stone, and other age related issues.

Anyone desiring to clean the headstones and markers in a cemetery should get permission from a descendant, the sexton, cemetery superintendent or the town, in that order. If unsure who to ask, go to your town cemetery keeper and inquire. It is not acceptable to take it upon yourself to clean the headstones without permission, without learning the correct methods or not using approved materials. You may however, clean your own family members' stones.



The standard that Professional Cemetery Preservationists and Stone Conservators work on is "Do No Harm", and it is imperative that you perform your work to the same "Do No Harm" standard.

Every time a marker is cleaned, minute particles are removed from the surface of the stone. It can be harmful to clean them too often. Most markers in cemeteries are made of limestone, sandstone, slate, marble, granite, or in some cases concrete. However, each marker's condition is different and you should base your cleaning on the condition of that stone. Cleaning headstones helps to preserve them and it should never be your intent to make them look new again, just clean.

We, Cemetery Conservators for United Standards, have established and follow standards, precautions, procedures, and have listed materials that we use for cleaning cemetery headstones and markers. Be sure to read this information completely and understand the proper procedure before proceeding to clean stones in a cemetery.

PRECAUTIONS



- Ensure the stone is stable, secure, level and that all sections are securely attached to each other. Also check that the stone is not in danger of falling if you put pressure on it. Your safety is of the utmost importance.
- If the weather is hot and the stone surface is hot to the bare hand, do not put cool water on it. It may cause stress cracks in the stone. Cover the stone to cool it or let the water warm in the sun before using it.
- Do not clean a stone if there is any chance of freezing temperatures. Water will get into cracks and freeze. Water expands when frozen and may crack the stone.
- Do not attempt to clean a broken headstone.
- Make sure you have enough water to thoroughly clean and then rinse the stone several times. Leave no residue from the cleaning agent on the stone as it could cause permanent streaking.
- NEVER use household cleaners, bleach, metal tools, scouring pads, wire brushes, power tools, pressure washers or nyalox brushes. A newer product called Wet and Forget has not been thoroughly tested, and this is not a product we can recommend.

INSPECTION

Check for delamination of the stone, this is where layers of the stone begin to separate. Lightly tap on the stone with your knuckle or other soft object. If you hear a 'hollow' sound, the stone is probably delaminating. Do not attempt to clean. This should be left to a professional stone conservator or preservationist.

- Check for stress cracks. This is an easy check. Thoroughly wet the stone with water. Observe it while it is drying. Stress cracks will show up as wet 'streaks' because the water has entered the crack and will take longer to dry than the surface water. If the stress cracks are wide or severe, again leave this stone to the professionals.
- Check for loose sections in the marker. If it needs to be secured, leveled or reset stop. This is a job for a professionals. Always err on the side of safety.
- Check to see if biological growth has cracked the stone. The growth must be carefully removed and the stone repaired before cleaning. Material at the cracked edges is very fragile and will chip off even with gentle cleaning.

BASIC CLEANING PROCEDURE

- Soak the stone with water and wait a few minutes. Gently remove loose materials from the surface. Once saturated, the lichens and moss on the stone will loosen and can be removed easily with a plastic scraper or wooden spatula. This helps remove the big particles so you will not be rubbing them back into the stone. Rinse thoroughly.
- Clean the wet stone with a wet brush by making random circular motion, and rinsing frequently to remove dirt and biological growth. Always be as gentle as possible.
- Keep both the brush and the stone wet at all times while cleaning. Be sure to clean the entire stone. Normally, clean water and soft scrubbing will remove the dirt and grime. If not, use one of the recommended cleaning agents from the materials' list (see further instruction below). Be sure to rinse often and thoroughly.



SPECIAL CONSIDERATIONS

REMOVAL OF PLANT GROWTH

- If plants, especially members of the Ivy family are attached to the stone, do not pull them off. Cut the plants at the base and let them die. If you can, cut the plants about every six inches. This will decrease the amount of time it takes them to die.

You may not be able to clean the stone at this time and have to wait until the plant is dead. When the plant has died, wet the stone and gently remove the plant from the surface. Proceed with a basic cleaning.

REMOVAL OF BIOLOGICAL STAINING

- Lichens, moss, mold and other biological growth, especially bird droppings can cause severe damage and staining to headstones and markers. We use D/2, a non-toxic biological, that kills and deters biological growth.
- Soak the stone and while it is wet, spray the stone with D/2.
- Wait 10-15 minutes and using your brushes scrub the D/2 into the stone, with special emphasis on areas that have been stained. Rinse thoroughly. You may have to apply more D/2 to certain areas.
- Even if the stain is not removed after D/2 has set on the stone, been scrubbed in and rinsed, have faith it will continue to work for weeks, working its way into the pores killing biological growth that may have grown inside the stone. Don't be surprised if certain areas of the stone change color. That is the D/2 working, this is normal and the stone will return to its usual color in a few days.



For further instruction you can view the following videos on proper cleaning:
<https://youtu.be/CIQS-ZryE20> <https://youtu.be/yK-p2owZxjQ>

RECOMMENDED EQUIPMENT AND MATERIALS

Safety glasses and protective gloves.

Knee pads and boots. Old markers may have broken glass around the base.

Natural or plastic soft bristle brushes of various shapes and sizes & plastic grout brushes.

Wooden scrapers, craft sticks, tongue depressors, and wooden skewers,

Plastic scrapers, various sizes.

Buckets for holding your supplies and water.

Quart size plastic spray bottles.

1 to 2 gallon garden type pump sprayer filled with clean water.



A Small can of compressed air or mini leaf blower.

Rags and old towels.

Gallons and gallons of water. Old clean plastic milk bottles work great for transporting water to the markers.

D/2 biological solution. It works best at 45 degrees and above. Use undiluted for best results. (Our group recommends D/2 as the first choice in cleaning headstones and markers)

Orvus non-ionic cleaner can be used to remove heavy environmental deposits, grime and bird droppings, if water alone doesn't remove the grime.

Enviro Klean, Biowash, Modec MDF-500 and Revive are also approved biological cleaners.

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