

Wood Ashes: To Use or Not To Use

By Gretchen Spencer, Fairfax Master Gardener

Is there a place for wood ashes in the garden or on the lawn? This is a question I've asked myself over the years as I carefully scooped the wood ashes out of our well-used wood stove that keeps our family room cozy and warm all winter long. Careful to make sure that the ashes are completely cool, I usually place them in a metal container outdoors for a few days before bagging them up and putting them in the trash, despite the nagging feeling that there must be a use for them in the garden. Having tried over the years to commit myself to organic gardening, I decided to fully investigate this question.



First, I learned that it's important to understand the composition of wood ash. Wood ash, especially ash from hardwood trees, contains calcium, potassium (potash), phosphorus, magnesium and other trace elements. During the burning process, nitrogen and sulfur burn off as gas. Wood ash is highest in calcium and acts the same way on soil as lime: it raises the pH of the soil to make it more alkaline. Potassium, or potash, is one of three major nutrients that all plants need. The other two being nitrogen and phosphorus. Potassium is important for the overall strength of the plant and helps plants to resist diseases. Wood ash is also a good source of micronutrients that plants need in trace amounts.

photo: JoEllyn Argabright, Kansas State University



So, given the beneficial composition of wood ash, it seems like I should be able to just spread ashes everywhere in my garden and on my lawn. Unfortunately, it's important to know whether or not your garden and lawn would benefit from a substance that is high in calcium, like lime. The best thing to do is to have your soil tested to determine its pH. If your soil has a pH of 7 or higher, you should not put wood ashes on your garden or yard. Most plants prefer a pH around 6.5. Also, you should not put ashes around acid-loving plants such as azaleas, hollies, rhododendrons and blueberries. They should also not be used on potatoes, as a high pH soil can cause scab disease. Additionally, ashes are caustic, so they should not be placed around seedlings or on foliage.

If your soil test indicates that your lawn or garden needs to have its pH raised, you can apply it to your lawn, remembering that you will need two to three times as much wood ash as lime. Apply no more than 10 to 15 pounds of ash per 1,000 square feet of lawn. Never use more than 20 pounds per 1,000 square feet because toxicity problems could result from excessive usage. The benefit of using ash is that it is very water soluble and changes the soil pH more quickly than does limestone, which can take six months or more to change the pH. Also, it provides potassium and other micronutrients that benefit plant growth. Studies have shown that wood ash produces better plant growth than limestone.

Additionally, wood ash can be sprinkled lightly on the compost pile, taking care to mix it in and not let it clump on decomposing plant material. Other recommendations include spreading ashes around the base of hardwood trees or side-dressing growing plants that are not acid-loving with a handful of dry ash. Of course, scratching it into the soil is helpful. Apple trees especially benefit from an application of ashes. You can also make a tea for tomatoes by immersing a permeable cloth bag filled with five pounds of ashes into a 50-gallon garbage can filled with water. After four days, pour a cupful of water around each tomato plant weekly, once the plants begin to flower. This will give the tomatoes a much appreciated potassium boost.

This early spring, I will scatter some ashes around my hardwood trees and around shrubs that I know are not acid-loving. I will also sprinkle some on my perennial garden, as a previous soil test indicated that I should add lime to it. Additionally, I plan to keep a bucket of ashes on hand and occasionally add a light layer to the compost pile. I know I will not only be raising the pH, but adding vital nutrients as well. If you do plan to use wood ashes on your garden or lawn, be sure to only use dry ash that comes from burning wood, not from burning charcoal, trash or fake logs.

Finally, the early spring is a perfect time to have your soil tested so you will know the correct amount of lime and fertilizer to apply to your lawn or garden. The Virginia Cooperative Extension Publication 452-129 gives detailed instructions on how to take a soil sample. Soil tests kits are available at libraries in Fairfax County, Merrifield Garden Centers, and from your local agricultural extension office.

The answer to the question I posed at the beginning of this garden is, yes. There is a place for wood ashes in the garden when used judiciously. However, knowing the nutrient needs of your lawn and garden is key to creating and maintaining a healthy landscape.

Resources

- [The benefits of wood ash in the garden](#), Barbara Damrosch and Adrian Higgins, The Washington Post, 2012
- [Wood ashes can benefit gardens and lawns](#), Oregon State University, OSU Extension Service
- *The Encyclopedia of Organic Gardening*, by the staff of Organic Gardening Magazine, 1978
- [Using Wood Ash in the Garden](#), University of Illinois Extension
- [Best Management Practices for Wood Ash as Agricultural Soil Amendment](#), The University of Georgia Cooperative Extension
- [Soil Sampling for the Home Gardener](#), VCE Publication 452-129, Virginia Cooperative Extension



photo: University of New Hampshire Cooperative Extension