USING WOOD ASHES IN YOUR GARDEN
Julie Falk, Adams County PA Master Gardener

Hurricane Sandy brought a few days without power to our house recently, and the fireplace figured prominently in heating and cooking. As we were straightening up afterwards, I found myself staring into the new ash bucket. I knew that wood ashes could be useful in outdoor gardening, and I hate to waste anything, but I wasn’t sure about the details. It turns out that cooperative extensions all over the country have dealt with the question, so it wasn’t difficult to come up with some awfully good advice about where, when and how much.

Here’s the Mr. Wizard part. The burning of wood releases nitrogen and sulfur as gases, but calcium, potassium, magnesium and trace elements are left behind. The remaining calcium carbonate, rather like lime, raises the pH of the soil (making it more alkaline). This means wood ashes can be helpful in neutralizing acidic soils – if you have a need for that. Calcium and potassium are both essential to the growth of plants, both for root development and supporting photosynthesis. The ashes from your woodstove or fireplace have a very fine particle size, so they react in the soil more quickly than an application of lime.

Hardwood trees produce more ash and potassium than softer woods, but in general a cord of wood will produce about 20 pounds of ash, enough to fill a five-gallon container. So how much ash should one use on the lawn or garden? Well, that depends on the needs of your soil, and the desires of your proposed crop. It is recommended that we test the acidity of our soil every year or two – another good New Year’s resolution. Acidic soils with pH less than 5.5 should be improved by the application of ash in the correct amount. That would be the equivalent of 20 pounds (5 gallons) spread over 1,000 square feet of lawn or garden, and worked into the top 6 inches of soil. There would be no benefit to applying ash to soil that is already neutral or alkaline, with a pH of 7.0 or greater.

The other thing to consider is what you are planting. Some plants are acid-loving, like blueberries, azaleas and rhododendrons. They would be quite adversely affected by the application of wood ash. There is also a special precaution against putting ash in ground where potatoes will be planted, as this encourages the development of potato scab (deep lesions in the potato skin). The alkaline-preferring plants include asparagus and juniper, among others.

There are a few other cautions related to using wood ash. First, be certain that you are using ashes from untreated wood and not from cardboard, paper or treated lumber. The residues from these treated products can contain harmful chemicals. And speaking of chemicals, remember that wood ash has bleach-like qualities, so you should wear gloves, mask and eye protection when handling it. Broadcasting it on a windy day …. Not sensible. You shouldn’t place ash on your seedlings because they cannot tolerate the intensity of the salts in ash. Finally, don’t mix ash with nitrogen fertilizers because you could unintentionally produce ammonia gas …. Also not sensible.
If you cannot use ash on your garden, there may be a place for it on your compost pile if you are composting a lot of acidic pine needles or oak leaves. Wood ash there can help to keep the compost neutral when a little is sprinkled over the acidic layers.

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