**Brian Maddy, County Extension Agent**

**Ashes to Ashes**

**Many churches celebrate the beginning of the Lenten season with receiving ashes on Ash Wednesday. The purpose is to remind us that we are dust and to dust that we will return. Ashes also have significance with regard to improving the quality of our soils. The extension office has received calls this year concerning the use of wood ashes as a fertilizer for the garden. Wood ash is defined as the inorganic and organic residue remaining after the combustion of wood.**

**The use of ashes as a fertilizer goes back to the Roman Empire where ancient Roman scientists documented the value of ashes as a fertilizer. Back in the 18th century America farmers clearing forest land discovered the benefits of ash derived potassium, one of the essential nutrients for plant growth. Most of our trees that were cut down for land clearing were dragged to low places in fields, “potholes” and burned. The farmers would first girdle the trees and wait for them to die before cutting. The ash in the potholes was referred to as “potash”. The ash was a very good source of potassium and as “potash fever” became the rage with farmers everywhere, the young United States began exporting potash to Great Britain. The very first patent granted by the US Patent Office was for a method of making fertilizer from wood ash. Cheaper sources of potassium eventually killed this market.**

**This year’s cold winter has produced a lot of ashes from wood burning stoves. Since wood ash is derived from plant material it can supply many of the nutrients that plants require with the exception of nitrogen and sulfur, which when burned are lost as gases. Calcium, potassium, phosphorus, magnesium and trace elements remain. The calcium in wood ash reacts just as lime would in increasing the pH of the soil (reducing the soil acidity). Wood ash should never be used as a fertilizer for blueberries, azaleas or rhododendrons or other acid loving plants.**

**Before ever applying any wood ash as a fertilizer, you should first soil test to determine the pH and the nutrient level of the soil. Wood ash may be toxic to plants if the pH is 7 or above or if potassium levels are high. The commercial grade of wood ash is approximately 0-1-3 (N-P-K). Because of the nutrients contained in wood ash, plant growth can be increased up to 45% over limestone.**

**The fertilizer value of wood ash depends on whether it’s a hardwood or softwood. Hardwoods such as oak weigh more per cord and produce more ash per pound of wood burned. Softwoods such as our southern pines weigh less and contain fewer nutrients. Hardwoods will produce almost three times as much ash and five times as many nutrients as softwoods.**

**According to Oregon State University, ash from a cord of oak would meet the potassium needs of a garden approximately sixty by seventy feet. On a lawn, apply no more than 10 – 15 pounds per 1000 square feet.**

**To keep a neutral pH (6-7) in the compost pile, sprinkle the wood ash on each new layer of the compost pile. It also adds nutrients to the mixture. A very light layer of ash spread around the base of plants will discourage plant feeding insects, slugs and snails. It will draw water from the invertebrates’ bodies. The plants lose the protection once the ash gets wet.**

**There are also some very important safety considerations. Wood ash is highly alkaline; handle it as if it were household bleach. Wear gloves, eye protection and a dust mask. Do not place the ash in piles or clumps. It may become too concentrated for the plant and cause injury. It works best if it’s incorporated or mixed evenly into the soil.**

**Never apply ash to newly germinated seeds; the salts in ash may damage the seedlings. Using wood ash on potatoes promotes potato scab disease.**

**Never use ash from burning trash, cardboard, coal, painted or stained wood or pressure treated wood. The ash may contain elements toxic to plants.**

**Never use ash with ammonium sulfate or ammonium nitrate because they will react and produce ammonia gas.**

**Wood ash when used and handled properly can be a good source of nutrients for the garden. Make sure you soil test before applying any wood ash and be sure to follow all the safety precautions.**

**Brian Maddy is the ANR Agent for Troup County Extension. The Troup County Extension office is located at 114 Church Street, LaGrange, GA. 30240 (706) 883-1675. Monday - Friday/8:00am-5:00pm.**