THE GRAPEVINE

January 30th, 2020
Larry Crouse
Extension Horticulture Agent

GROWING YOUR OWN FIREWOOD

In order to avoid energy costs, some homeowners are turning to wood for heat. Plant species is an important consideration as not all trees have the same density and therefore, heat value. The greater the dry weight, the better. The highest value for trees commonly found in Kansas is osage orange (hedgeball tree) at 4,800 pounds per cord. Osage orange has a gnarly growth habit and a nasty set of thorns. This species also sparks which isn't a problem in a wood-fired boiler but certainly would be in an open fireplace. Black locust is next with 4,200 pounds per cord. Black locust is a fast grower and also has excellent burning qualities and makes a nice bed of coals. However, it is hard to split, suckers, and has some relatively small thorns, especially on young trees. Bur oak and red oak come in at 3,800 and 3,500 pounds per cord respectively but are not fast growers. Mulberry, however, has the same weight as red oak but grows more quickly. Silver maple has less heat value (3,000 pounds per cord) but is a very fast growing tree. Black locust is a tempting choice for this purpose due to its heat value and fast growth. However, black locust suckers and is invasive and can spread to areas you don't want and so be careful if you choose this species. Another species, such as mulberry may work better for you. Or consider planting several different species in rows. So, how do you set out your plantation? Dr. Wayne Geyer, our late forestry professor, did many woody biomass studies over a period of 35 years. Following are some recommendations that have come out of his studies.

- Plant on a close spacing, 4 to 6 feet apart. This maximizes yield and reduces side branching.
- Control weeds the first two years.
- Harvest every 5 years though slower growing trees will take longer. Most trees will resprout and can be reharvested.
- Plant about 1 acre per year for 5 years if you wish to supply the majority of the firewood needed to heat your home.

Trees mentioned above and available from the Kansas Forest Service include mulberry, osage orange, bur oak, red oak and silver maple.

Use a Planting Calendar

If you start vegetable plants indoors, it is often helpful to list seeding dates on a calendar so that plants are ready for transplanting at the proper time. To do this, choose your transplant date and count back the number of weeks necessary to grow your own transplants. For example, cabbage, broccoli, and cauliflower are usually transplanted in late March to early April. It takes 8 weeks from seeding to transplant size. Therefore, plants should be seeded in early February. Below are examples of some common vegetables grown for transplants and a recommended date for seeding. Dates are Saturdays as this is when many homeowners have the most free time. The dates are not set in stone, and a week earlier or later will not ruin the plants. Also, you may want to seed a week or two earlier if you are in southern Kansas and possibly a week later if you are in northern Kansas. Calendars can be reused year after year by a slight reset of the dates. Also keep notes on how well the transplants did so you can tweak the planting schedule. Your conditions may result in plants that need a bit more or a bit less time.

Cabbage, Broccoli & Cauliflower  February 1  March 28
Lettuce (if you grow transplants)  February 1  March 28
Peppers  March 14  May 9
Tomatoes  March 21  May 2
Preventing Potatoes from Sprouting in Storage

Home gardeners have had to rely on proper storage conditions (cool and moist) to prevent potatoes from sprouting. But sprouting will eventually occur even if the gardener does everything right. Research by Mary Jo Frazier, Nora Olsen and Gale Kleinkopf from the University of Idaho have found products that should help home gardeners. These researchers were looking for an organic method to control potato sprouts. They found essential oils from some herbs and spices to be effective sprout inhibitors. Specifically, they found that spearmint oil, peppermint oil and clove oil suppressed sprouting by physically damaging rapidly dividing cells in the sprout. Each of these products is so safe that the FDA has approved them for addition to food. Several application methods were considered though most were only suitable for commercial storage facilities. The only practical method for homeowners was one the researchers labeled a "low-tech" wick method. This was accomplished by placing a small piece of blotter paper saturated with spearmint or peppermint oil in a box with the potatoes. This method was not recommended for the clove oil. Though it was found that peppermint and spearmint oils were equally effective in suppressing sprouts, the peppermint oil was less likely to affect flavor of the potatoes. Reapplication at two- to three-week intervals will be needed for continued sprout suppression. Little to no residue was found on the potatoes from these products due to their high volatility. The first application should be done before sprouting occurs. Blotting paper is much more difficult to find than it was in the past and so you may want to substitute blank newsprint. However, if blotting paper is desired, try herbarium supply houses. Blotting paper is used to press plant specimens.

Fruit Trees and Frost

If you are considering purchasing fruit trees this spring, there are certain factors that should be considered for some of our fruit tree species. Spring in Kansas is often unsettled with apricot and peach tree flowers being very vulnerable to late frosts that can kill fruit buds. Of course, the tree itself will be fine but there will be no to little fruit for that year. Other species of trees can also be affected but apricots and peaches are by far the most sensitive. Also, the closer a tree is to full bloom, the more sensitive it becomes to frost. Apricots are more likely to have frost kill flowers than peaches because they bloom a bit earlier. Though there are late-blooming apricot varieties, the differences between full bloom on early and late-blooming varieties appears to be slight. Research at Virginia Tech in the 90's showed a maximum of a 4-day difference between early and late varieties. However, in some years that may be all that is needed. The trees in the study that were considered late blooming included Hungarian Rose, Tilton and Harlayne. Harglow was not included in the study but is also considered late-blooming. Peaches are next on the list for being likely to be caught by a late frost. With peaches, two characteristics become important when considering whether they will be damaged. Like apricots, bloom time is very important but fruit bud hardiness should also be considered. In this case, fruit bud hardiness refers to hardiness to late frosts rather than the ability to survive extreme low temperatures during the winter. Late bloomers included 'China Pearl', 'Encore', 'Intrepid', and 'Risingstar.' The 'Intrepid' cultivar also has shown excellent cold hardiness when in flower. So, are there other considerations when looking at possible frost damage? Location can be very important. Planting on a hill which allows cold air to drain to lower elevations can help. Also, a location in town will be more likely to have a warmer micro-climate than an exposed location. Some gardeners will add a heat source under a tree during cold nights if they are close to a building. Heat lamps and charcoal briquettes are sometimes used but safety should be the first consideration.

Larry E. Crouse
Butler County Horticulture Agent
K-State Research & Extension
206 N Griffith, Suite A
El Dorado, KS 67042
(316)321-9660
lcrouse@ksu.edu