Video of the Week:  Vegetables; Planning Your Priorities

VEGETABLES

Starting Onion Plants Indoors

It can be difficult to find specific onion varieties in sets or transplants, so growing from seed may be a preferred option. Onions are one of the first plants to be seeded for transplanting because they take a significant amount of time (6 to 8 weeks) to reach transplant size and because they can be set out relatively early (late March in much of eastern and central Kansas). Therefore, we want to start onions in mid- to late-January. Onion seed should be placed ½ to 3/4 inch apart in a pot or flat filled with a seed starting mix. Place the container in a warm (75 to 80 F) location until young seedlings emerge. Move to a cooler location (60 to 65 F) when the seedlings are 1 to 2 inches tall. Make sure they have plenty of light, using florescent lights if needed. Start fertilizing when the seedlings reach 2 to 3 inches tall using a soluble fertilizer with each or every other watering.

Onion seedlings tend to be spindly with the remains of the seed sticking to the end of a leaf for several weeks. Encourage stockiness by trimming the ends of the leaves when the plants reach 4 to 5 inches tall. Start hardening off the onions in early March by moving the plants to a protected outdoor location. You may have to move them inside temporarily to protect them from extreme cold snaps. (Ward Upham)

ORNAMENTALS

Start Trees Off Right

Research from K-State’s John C. Pair Horticultural Center has quantified the effect of controlling grasses around newly planted trees. Jason Griffin, William Reid, and Dale Bremer conducted a study to investigate the inhibition of growth of transplanted, seedling trees when lawn grasses...
were allowed to grow up to the trunk. There were five treatments, including three with different species of grass:

1. Bare soil maintained with herbicides.
2. Area under tree mulched 3 inches deep.
3. Tall fescue allowed to grow under tree.
4. Bermudagrass allowed to grow under tree.
5. Kentucky bluegrass allowed to grow under tree.

All treatments were applied to Eastern redbud seedlings as well as to pecan seedlings. All trees were fertilized according to recommendations and watered during the growing season with up to 1 inch of water if rainfall was deficient. At the end of two years, trees were measured and harvested. Data was taken on caliper (diameter) 6 inches above the ground, weight of aboveground portions of the tree, leaf area, and leaf weight.

There were no differences in any measure between the mulched treatment and the bare soil treatment for either tree species. All measures showed significant growth increases if lawn grasses were controlled around the tree. Results include the following:

1. Caliper: Caliper measures 6 inches above the soil surface were twice as large for plots without grass than for those with either fescue or bluegrass, but only 50% larger when compared to the bermudagrass plots.

2. Top growth weight: Redbuds showed a 300% weight advantage for plots with grasses controlled than those without. Pecans showed a significant 200% increase.

3. Leaf area and leaf weight: Leaf areas were 200% larger in plots without grass competition and leaf weight showed a 300% increase.

The obvious conclusion from this study is that grasses must be controlled under a newly transplanted tree to get the best possible growth. Though there were no differences in growth whether mulch was used or not, you may still wish to mulch for aesthetic reasons or to help control weed growth. How far from the trunk should the grasses be controlled? Try a minimum of 3 feet. (Ward Upham)

**PESTS**

**Boxelder Bugs Inside Homes**

Usually boxelder bugs are a problem in the fall as they seek protection from the cold in houses, walls, around doors and windows, and various other cracks and crevices. However, we are receiving calls now from the McPherson area about these insects inside homes.

The adult is about 1/2-inch long, blackish with three red stripes on the thorax and red at the base of the wings. The nymphs are smaller and have red abdomens and lack...
wings. Inside the home, the adults become pests by their numbers, produce a foul odor when crushed, and may stain curtains with their fecal matter. They do not harm humans, clothing, structures, or food, but high populations are annoying. The best way to keep them out of the house is to seal cracks, gaps, or other points of entry with caulking compound or putty, and to use weather stripping around foundations, windows, and doors. Bugs found inside can be collected with a vacuum cleaner. Used bags should be removed and sealed so the pests don't escape. Another possibility is to use a wet/dry Shop-Vac with a layer of soapy water in the bottom. The insects will drown in the soapy water. (Ward Upham)

MISCELLANEOUS

Pecan Blog

Dr. William Reid, Pecan Research and Extension Specialist for Kansas and Missouri, has an excellent blog on growing pecans in Kansas and neighboring states. The blog is titled “Northern Pecans.” If you are at all interested in pecans, this is a blog you must visit. Excellent photography accompanied by Bill sharing decades worth of experience makes this a gold mine of information. The URL is http://northernpecans.blogspot.com/ (Ward Upham)

Bird Feeding

Severe winter weather is not only hard on people but can be a life and death struggle for birds. Though birds require water and shelter, food is often the resource most lacking during cold weather.

Many different bird food mixes are available because various species often prefer different grains. One seed that has more universal appeal than any other: black oil sunflower. If you are new to the bird-feeding game, make sure there is a high percentage of this seed in your mix. White proso millet is second in popularity and is the favorite of dark-eyed juncos and other sparrows as well as the red-winged blackbird.

As you become more interested in bird feeding, you may want to use more than one feeder to attract specific species of birds. Following is a list of bird species with the grains they prefer.

- Cardinal, evening grosbeak and most finch species – sunflower seeds, all types.
- Rufous-sided towhee – white proso millet
- Dark-eyed junco – white and red proso millet, canary seed, fine cracked corn.
- Many sparrow species – white and red proso millet.
- Bluejay – peanut kernels and sunflower seeds of all types.
- Chickadee and tufted titmouse – peanut kernels, oil (black) and black-striped sunflower seeds.
- Red-breasted nuthatch – oil (black) and black-striped sunflower seeds.
- Brown thrasher – hulled and black-striped sunflower seeds.
- Red-winged blackbird – white and red proso millet plus German (golden) millet
- Mourning dove – oil (black) sunflower seeds, white and red proso plus German (golden) millet.

Extended cold periods can also make water unavailable. A heated birdbath can be a tremendous draw for birds during times when all other water is frozen. Energy use is usually less than what most people expect IF the heater has a built-in thermostat.

If you would like more information, Chuck Otte, Agriculture Extension Agent for Geary County has a series of backyard birding guides at [http://gearycountyextension.com/NRMW.htm](http://gearycountyextension.com/NRMW.htm) (Ward Upham)

**Bringing Houseplants Down to Size**

We sometimes receive calls from gardeners who wish to donate houseplants that have outgrown their location. In most cases, we don’t have room to accept plants and suggest that people bring them down to size by air-layering. Air-layering is a process where a branch or the main stem is encouraged to form roots while still attached to the parent plant. After rooting, the original plant is discarded and the newly rooted one is potted as a replacement. Though this propagation technique cannot be used on all houseplants, it does work well on many that tend to outgrow their boundaries including croton, dracaena, dieffenbachia, Norfolk Island pine, rubber plant and schefflera.

Choose wood that is about 1 year old. Older or more immature wood often roots poorly, if at all. Any place on the stem that is of the proper maturity can be used, but a convenient location is often about 12 inches from the tip. Following are the steps required for air-layering:

- Leaves should be removed around the area to be air-layered.
- Wound the stem. This can be done by making a slanting cut upward, an inch or more in length and halfway through the stem. Place a portion of a toothpick in the cut so it cannot close and heal. If the stem is seriously weakened, use a stick “splint” to prevent breakage. Another method that works well is to strip the bark completely around the stem in a band 1/2 to 1 inch wide.
- Apply rooting hormone to the wounded surface of the cut or the stripped portion of the branch.
- Pack a baseball-sized wad of moist, unmilled sphagnum peat moss around the wounded area so it forms a ball. This is where new roots will form. It is important to use the long, stringy unmilled peat moss rather than the more common milled material so peat moss does not fall away from the stem when released. Even unmilled peat moss may need to be secured with string to keep it in
place.

- Wrap the ball of sphagnum peat moss with clear plastic wrap. Be sure to use enough wrap so that the plastic overlaps and prevents the ball from drying out. Secure the top and bottom edges of the wrap closed with electrical tape, string or other convenient fasteners.

Roots may appear in as little as a month though it may take much longer for the plant to be ready for transplanting. Check periodically to be sure peat moss remains moist. Water if needed. When roots have filled the peat moss, the plant is ready to be severed from the parent and transplanted. (Ward Upham)

**Growing Your Own Firewood**

With high energy costs, some homeowners are turning to wood for heat. I’m one of them. Fortunately, the farm has a number of volunteer trees that can be used for firewood. The most common species is Siberian elm but there are also some hackberry and mulberry. Though there may be enough volunteer trees to supply the need, better firewood trees would reduce the time and effort required to supply the wood needed. Actually, storm-damaged trees or trees in the wrong place will always provide a measure of the demand but a significant supply could be supported by a firewood “plantation.”

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. This tree was rejected outright as I have had experience with this species; little of it pleasant. Osage orange has a gnarly growth habit and a nasty set of thorns. This species also sparks which isn’t a problem in my 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 would be my first choice for this purpose though you may wish to plant rows of several species.

So how do you set out your plantation? Dr. Wayne Geyer, one of our forestry professors, has done many woody biomass studies over the past 35 years. Following are some recommendations that have come out of his studies.

- Plant locust a few rows in from the field edge to reduce suckering in the field.
- 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, 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. (Ward Upham)

**Contributors:** Ward Upham, Extension Associate

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