Ds Notes 053022

REMINDERS

Mulch vegetable garden.

Pinch mums when they reach 6" tall to encourage bushier growth.

Make a vegetable garden "map" so that you remember what was planted in what spot.

Break up crust on soil of vegetable garden after heavy rain to allow roots to breathe.

No need to spray for cedar-apple rust after Memorial Day

Don't work soil too wet. Squeeze a handful of soil and push your finger into the soil. It will crumble if it is dry enough to work.

Take care of weeds when they are small as they are easier to control and will not compete with your vegetables or flowers. Consider using a scuffle hoe as they are quick to use and are less likely to bring weed seeds to the surface.

Onions Developing

This is the time of year that onions grow and develop rapidly. Regular watering (if the soil ever dries out) and a light fertilization are helpful to maximize growth. If your soil tends to be alkaline, use ammonium sulfate (21-0-0) at the rate of ½ cup per 10 feet of row. Or you can use a lawn fertilizer such as a 29-5-5, 27-3-3 or anything similar but only use 1/3 cup per 10 feet of row. Make sure the lawn fertilizer does not have a weed preventer or weed killer included. Sprinkle the fertilizer 2 to 3 inches alongside the row and water in. Do not fertilize after the onions start to bulb.

Onions develop so that as much as 2/3 of the bulb remains out of the soil. There is normal and there is no need to cover the bulb with soil. (Ward Upham)

Mulching Tomatoes

Soils are warm enough now that tomatoes can benefit from mulching as long as the soils are not saturated with water. Tomatoes prefer even levels of soil moisture and mulches provide such by preventing excessive evaporation. Other benefits of mulching include weed suppression, moderating soil temperatures and preventing the formation of a hard crust on the soil. Crusted soils restrict air movement into and out of the soil and slow the water infiltration rate.

Hay and straw mulches are very popular for tomatoes but may contain weed or volunteer grain seeds. Grass clippings can also be used but should be applied as a relatively thin layer – only 2 to 3 inches thick. Clippings should also be dry as wet clipping can mold and become so hard that water can't pass through. Also, do not use clippings from lawns that have been treated with a weed killer until some time has passed. With most types of weed killers, clippings from the fourth mowing after treatment may be used. If the lawn was treated with a product containing quinclorac (Drive), the clippings should not be used as mulch. If the weed killer used has a crabgrass killer, it likely contains quinclorac. (Ward Upham)

‘Tip' Blackberries, Black Raspberries and Purple Raspberries

The growth and fruiting habits of blackberries and raspberries are the same. The root system is perennial, surviving many years, but canes are biennial and only live two years.

First-year canes are called primocanes. They emerge from the soil and grow but with most varieties, the primocanes do not fruit. Primocanes become floricanes the second year. Floricanes fruit and then die. Each cane lives only two years. New primocanes are produced each year and therefore primocanes and floricanes are present each year.

Pinching (tipping) the top 2 to 3 inches of the primocanes increases branching and fruiting. Tipping can improve yield by 3 to 5 times and is vital is you wish to have good yields.

The height and frequency of tipping varies with species and whether the variety fruits on primocanes or not. Those that do fruit on primocanes are often referred to as "everbearing." Those that only produce fruit the second year, we will call "traditional." Below is a listing of the different methods used.

Blackberries: Traditional - Tip at 4 feet

Blackberries: Everbearing - Tip at 25 to 30 inches high. Laterals are also tipped when they reach 25 to 30 inches.

Black Raspberries - Tip at 3 feet

Purple Raspberries - Tip at 36 to 40 inches

Red Raspberries - Do not tip. (Ward Upham)

Spring-Flowering Bulb Foliage can be Removed

It is important to leave spring-flowering bulb foliage in place until it "ripens" or becomes brown. The energy produced by the leaves after flowering is transferred to the bulb so that it can flower the following year. The ripening process should be near completion now for tulips, daffodils and various other spring-flowering bulbs. Use clippers, scissors or even a mower to remove dead foliage. Also, try to map out where the bulbs are planted as there will be no foliage to make the location next fall when it is time to fertilize. (Ward Upham)

Trees Slow to Leaf Out

There have been a number of trees that have been slow to leaf out this spring. In most cases, this is likely due to stress. This year, many trees were stressed from the abnormally dry weather last fall and winter.

So what do we do? The only thing we can do now is try to avoid any further stress. Basically that means watering during dry weather. Don't overdo it as too much moisture can damage root systems. The goal is to keep the soil moist but not waterlogged while allowing the top of the soil surface to dry between waterings.

So how do we water trees? One inexpensive method is to use soaker hoses. Unfortunately, soaker hoses are notorious for non-uniform watering. In other words, you often receive too much water from one part of the hose and not enough from another. However, we can minimize this problem by using certain methods. On small trees, circling the tree several times with the soaker hoses will even out the amount of water applied. On larger trees, we use a different approach. Hooking both the beginning and the end of the soaker hose to a Y-adapter helps equalize the pressure and therefore

provide a more uniform watering. The specific parts you need are shown in the photo above and include the soaker hose, Y-adapter and female to female connector.

It is also helpful if the Y-adapter has shut off valves so the volume of flow can be controlled. Too high a flow rate can allow water to run off rather than soak in.

On larger trees, the soaker hose can circle the trunk at a distance within the dripline of the tree but at least ½ the distance to the dripline. The dripline of the tree is outermost reach of the branches. On smaller trees, you may circle the tree several times so that only soil which has tree roots will be watered.

Soil should be wet at least 12 inches deep as 80% of a trees roots are in the top foot of soil. Use a metal rod, wooden dowel, electric fence post or something similar to check depth. Dry soil is much harder to push through than wet and your probe will stop when it hits dry soil. How long it takes water to reach a 12 inch depth varies depending on the rate of water flow and soil. Record the amount of time it takes to reach 12 inches the first time the tree is watered. After that, simply water for that same amount of time. Watering every 2 to 3 weeks during dry weather should be sufficient. (Ward Upham)

Flooding Damage

Waterlogged soils push out oxygen that roots need to survive. Every living cell in a plant must have oxygen or it dies. Some plants have mechanisms to provide oxygen to the roots even under saturated conditions but most of our vegetables and flowers do not. The longer these plants are subjected to saturated soils, the more likely damage will occur.

Usually, as long as water drains away within 24 hours, the impact on plant health is minimal. However, shallow, stagnant water under hot, sunny conditions can literally cook small plants, reducing survival time to as little as a few hours.

Vegetables: What about safety regarding eating produce from a garden that has been flooded? Standing water should not cause a safety problem as long as the aboveground portions of the plant remain healthy. Do not use produce from plants that have yellowed. Also, using produce flooded with water contaminated with sewage (lagoon) or animal manure can also be dangerous.

The safest approach is to discard all garden crops that have been in contact with such water. Certainly, leafy vegetables should always be discarded. However, you may eat fruit from such crops as tomatoes, peppers, eggplants, sweet corn, squash, cucumbers, and similar vegetables that develops after the waters have subsided as long as the fruit is not cracked or soft. Always wash vegetables thoroughly before eating.

Lawns: Under the cool conditions of early spring, turfgrasses can often survive several days of flooding. However, during hot, sunny conditions with shallow, stagnant water, lawns may be damaged quickly, sometimes in a few hours. This situation often occurs when shallow depressions in a lawn allow water to pool. Note such areas and fill in with additional soil once the waters have subsided.

Trees: Trees differ markedly in their ability to withstand flooding. Some trees have mechanisms in place to provide oxygen to the roots of plants with water saturated soils and others do not. However, most trees will maintain health if flood waters recede in 7 days or less. It also helps if water is flowing rather than stagnant as flowing water contains more oxygen. If the roots of sensitive trees are flooded for long periods of time, damage will

occur including leaf f drop, iron chlorosis, leaf curl, branch dieback, and in some cases, tree death. Another danger of flooding is the deposition of sediment. An additional layer of silt 3 inches or more can also restrict oxygen to the roots. If possible, remove deep layers of sediment as soon as conditions permit. This is especially important for small or recently transplanted trees.

Try to avoid any additional stress to the trees this growing season. Ironically, one of the most important practices is to water trees if the weather turns dry. Flooding damages roots and therefore the root system is less efficient in making use of available soil water. Timely waterings are vital to a tree's recovery. Also be diligent in removing any dead or dying branches which may serve as a point of entry for disease organisms or insect pests. The following information on tree survival came from the US forest Service.

Trees Tolerant of Flooding: Can survive one growing season under flooded conditions. Red maple, silver maple, pecan, hackberry, persimmon, white ash, green ash, sweetgum, sycamore, eastern cottonwood, pin oak and baldcypress.

Trees Moderately Tolerant of Flooding: Can survive 30 consecutive days under flooded conditions. River birch, downy hawthorn, honeylocust, swamp white oak, southern red oak, bur oak, willow oak and American elm.

Trees Sensitive to Flooding: Unable to survive more than a few days of flooding during the growing season. Redbud, flowering dogwood, black walnut, red mulberry, most pines, white oak, blackjack oak, red oak and black oak.

After the Flood: Soils often become compacted and crusted after a heavy rainfall. This also can restrict oxygen to the roots. Lightly scraping the soil to break this crust will help maintain a healthy root system and therefore, a healthy plant. Be careful not to cultivate too deeply as shallow roots may be damaged. If you think the excessively wet weather will continue, bedding up the rows before planting even just a couple of inches, will improve drainage and allow for better aeration. (Ward Upham)

Sidedressing Chart Available

Gregg Eyestone, Horticulture Agent from Riley County, has put together a nice chart that covers sidedressing nitrogen on annual flowers, certain perennial flowers, vegetables and various small fruit. Sidedressing (also called topdressing) is applying nitrogen fertilizer as plants are growing to give them an extra boost. Done correctly, sidedressing can improve vegetable, fruit and flower production. This will be especially important this year in areas that have received excessive rainfall as nitrogen has likely been lost. Gregg lists the crop, the amount of fertilizer needed, and suggested time of application. Rates are given for ammonium sulfate, urea and blood meal. You may find the chart at http://tinyurl.com/hxtgres (Ward Upham)

Little Barley in Lawns

Many people mistake little barley (Hordeum pusillum) for a little foxtail because the foxtail and little barley seedheads are similar. However, little barley is a winter annual that comes up in late September - October and spends the winter as a small plant. It thrives in the cooler spring temperatures, forms seed heads and dies out usually by July. Foxtail, on

the other hand, is a summer annual that does well in hot weather. Also, foxtail will not produce seedheads until mid- to late-summer.

So, why are we talking about little barley now? Because now is NOT the time to control it unless it is in an area where a non-selective herbicide that kills everything such as glyphosate (Roundup) can be used. The best control for little barley in turf is a thick lawn that is mowed high enough that sunlight does not hit the soil. Little barley seed will not germinate in such conditions.

Overseeding in late August to early September can thicken up a tall fescue lawn and help prevent a little barley infestation. However, early germinating little barley may not be controlled. So, if you do not plan to overseed even though the lawn is a bit thin, preemergence herbicides can be used to provide at least partial control of this weed.

Dimension (dithiopyr), is labeled for barley (Herodium spp.) which would include little barley and therefore can be used to keep this weed under control. Because little barley is a winter annual, apply the preemergence herbicide in mid-September and water in to activate. However, you may have to apply at least a couple of weeks earlier if you are in southern Kansas. If overseeding, do not apply any preemergence herbicide as it will interfere with the germination of tall fescue. (Ward Upham)

Termites

Termites have been "swarming" around the state for about the past 2 weeks. Apparently weather conditions this year have been conducive to this behavior which has caused considerable concern--especially since it has been a couple of years since we have seen, or had any reports of, this swarming activity (actually, since 2019). Termites have usually swarmed about 10 days after the 1st warm spring rains, which have generally occurred in April. But we have seen termites swarm in late February to early June, depending upon the weather. Since termite swarms are more common this year a little refresher is apparently needed to help answer some questions. Adult termites (see figs 1 & 2), the "swarmer's", are relatively easy to distinguish from ant "swarmer's". Termite adults have 4 wings of equal size--ants have hind wings smaller than their front wings; adult termites are dark brown/black with a more cigar shaped body--ant swarmer's have a distinct "waist"; termite swarmer's have straight antennae--ants have bent or elbowed antennae. Also, often at the site where the termite swarmer's are issuing there may be a few white termite workers and/or soldiers whereas ants do not have these white soft bodied individuals present. For more information, please see "Household Pests of Kansas: MF 3291. All pictures courtesy of David Hallauer.

Bagworms…Getting Close!

We are getting close to the time when the 1/8 to 1/4 of an inch bags associated with the bagworm, Thyridopteryx ephemeraeformus, will be present on broadleaf and evergreen trees and shrubs. Therefore, be prepared to take action against bagworms once they are observed on plants. Although bagworm caterpillars primarily feed conifers, they also feed on a widerange of host plants including many broadleaf plants, such as; elm, flowering plum, hackberry, honey locust, linden, maple, oak, rose, sycamore, and wild cherry. It is important to apply insecticides when bagworms are 1/4 of an inch long or less (Figure 1) to

maximize effectiveness of insecticide applications and subsequently reduce plant damage. Many insecticides are labeled for use against bagworms, however, the insecticides that can be used to manage populations of bagworms early in the season are Bacillus thuringiensis subsp. kurstaki and spinosad.

These active ingredients are commercially available and sold under various trade names. The bacterium, Bacillus thuringiensis subsp. kurstaki, is only active on young bagworm caterpillars and must be consumed or ingested to kill bagworm caterpillars. Therefore, thorough coverage of all plant parts and frequent applications are required. The insecticide is sensitive to ultra-violet light degradation and rainfall, which can reduce residual activity. Spinosad is the active ingredient in several homeowner products, including Captain Jack's DeadBug Brew and Monterey Garden Insect Spray. The insecticide works through contact and ingestion, however, the insecticide is most effective when ingested by young bagworm caterpillars. The key to managing bagworms with these insecticides is to apply the insecticides early and frequently enough to kill the highly susceptible young caterpillars feeding on plant foliage.

Applying insecticides weekly for four to five weeks when bagworms are first noticed will reduce problems with bagworms later in the year. Bagworms commonly start feeding on the tops of trees and shrubs. Therefore, thorough coverage of all plant parts and frequent applications are important in managing bagworm populations. The reason multiple applications are required is that bagworm caterpillars do not emerge (eclose) from eggs simultaneously but emerge over time depending on temperature. In addition, young bagworms can be 'blown in' (called 'ballooning') from neighboring plants on silken threads. If left unchecked, bagworms can cause substantial plant damage, thus ruining the aesthetic quality of plants. Furthermore, bagworms can kill plants (especially newly transplanted small evergreens), because evergreens usually do not produce another flush of growth after being fed upon or defoliated by bagworms.

If you have any questions on how to manage bagworms in your garden or landscape contact your county horticultural agent, or university-based or state extension entomologist.

You can also read the following extension publication on bagworms: Cloyd, R. A. 2019. Bagworm: insect pest of trees and shrubs. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. Kansas State University; Manhattan, KS. MF3474. 4 pgs. http://www.bookstore.ksre.ksu.edu/pubs/MF3474.pdf

There are several insect pests currently feeding on plants in vegetable gardens including: Colorado potato beetle, Leptinotarsa decemlineata, adults feeding on potato plants (Figure 1); harlequin bug, Murgantia histrionica, adults mating and feeding on horseradish plants (Figure 2); and flea beetle adults feeding on potato plants (Figure 3). There are extension publications for the Colorado potato beetle and harlequin bug available with the links provided below: Colorado potato beetle: insect pest of vegetable crops (MF3541) https://bookstore.ksre.ksu.edu/pubs/MF3541.pdf Harlequin bug (MF3135) https://bookstore.ksre.ksu.edu/pubs/MF3135.pdf
These extension publications provide information on management strategies that can be implemented to avoid or minimize plant damage associated with Colorado potato beetle

and harlequin bug. For flea beetle adults, you can contact your county horticulture agent for information on management strategies including the insecticides that can be applied to manage flea beetle adult populations. For more information on managing insect pests in your vegetable garden contact your county horticulture agent or a state extension specialist. Raymond Cloyd, Horticultural Entomology.

Protecting your home from wildfire

Note: This is a recently revised (April 2022) publication from K-State Research and Extension, MF-2241 https://www.bookstore.ksre.ksu.edu/pubs/MF2241.pdf

Wildfires have always been part of the Kansas landscape. As the rural population increases, so does the need to protect life and property from wildfire. While rural fire departments provide this protection to life and property, recent years have increasingly seen fires that exceed the ability of even the best fire departments to control, quickly creating a situation where firefighters simply cannot defend every threatened structure. Additionally, these fires are threatening properties within cities as well, so it is no longer solely a rural concern.

These steps referred to as creating "defensible space" begin inside your home and move out from there.

Defensible Space Zones. (Refer to Figure 1 below)

Zone 1 – Extends 30 feet from the edge of the home or any attached structure such as a deck or patio. This zone requires the most maintenance and the least amount of flammable material.

Zone 2 – Extends 75 feet beyond the edge of Zone 1. This zone contains more vegetation and flammable materials, but still needs regular maintenance activities to reduce fuel load and risk.

Zone 3 – Extends from the edge of Zone 2 to the property boundary. This zone includes the natural surroundings of your home. The vegetation closest to your home in this zone should still receive an annual "clean-up" such as mowing, pruning, removing dead vegetation, and thinning overcrowded trees and shrubs.

Note: Fire moves faster and burns more intensely uphill. Defensible space zones that are downslope from your home need to be extended beyond the recommended distances based on slope steepness.

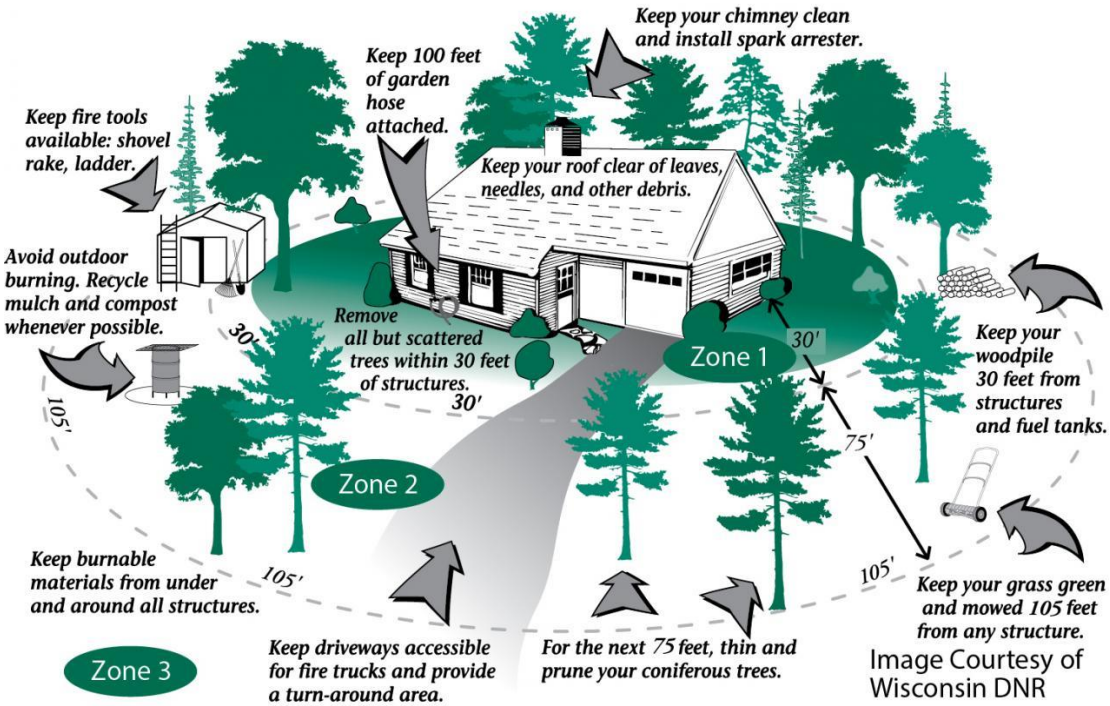

Figure 1. Defensible space zones

Additional Defensible Space Practices

- Fire-resistant roofing materials such as metal, tile, or at least Class C shingles prevent your roof from being a source of ignition from the hot embers of a wildfire.
- Windows should be at least double paned. In case of wildfire move flammable materials such as curtains and furniture away from windows. Radiant heat can ignite these materials through windows.
- Stone, brick, or other nonflammable siding is safer than wood or vinyl siding.
- Zone 2 should have tree crowns spaced at least 10 feet from each other. All trees in Zones 1 and 2 should be pruned to a height of three times the height of surrounding vegetation (usually 6 to 10 feet), but do not remove more than one third of the live crown.
- Propane tanks, gasoline, and wood piles should be stored 30 feet from structures.
- All exterior vents should be covered with a nonflammable wire mesh 1/8 inch or smaller.
- Remove all dead vegetation from Zones 1 and 2. Especially prune any dead branches that overhang the roof or are within 15 feet of the chimney.
- If your property has no large year-round water source, consider working with neighbors or a home owners association to install one.
- Keep trees pruned and healthy in Zones 1 and 2.
- Maintain power line clearance. Have an arborist assist with existing trees that interfere with power lines. When planting new trees near power lines choose a species that has a mature height less than 25 feet.
- Make sure your address is clearly visible from the road from both directions, especially in low-visibility conditions.

• If you burn trash or use fire for vegetation management, consult local regulations and obtain proper training. Strictly follow all safety precautions.
• Develop a home emergency preparedness plan that includes: clearly posted emergency phone numbers, designated escape routes and meeting places, maintained fire extinguishers, and functioning smoke alarms.
• Teach children fire safety. Remember, children learn best by example!

Recommended Publications

• *Ready, Set, Go Kansas Action Guide*
• Prescribed Burning: Safety, L565
• *Prescribed Burning: Planning and Conducting*, L664

Other Information Sources

Your local fire department

Online

www.kansasforests.org
www.firewise.org
www.wildlandfirersg.org

This publication is made available in cooperation with the USDA Forest Service. The USDA is an equal opportunity provider, employer, and lender.

Also see another recently revised publication, Red Flag Warning and Fire Weather Information. MF2775. Eric Ward, Kansas Forest Service

Video of the Week: Growing Vegetables in Containers

https://kansashealthyyards.org/all-videos/video/spring-summer

Great Plains Bumblebee Atlas

The Great Plains Bumble Bee Atlas is a new region-wide community science project aimed at tracking and conserving bumble bees native to North Dakota, South Dakota, and Kansas. Community science means anyone can get involved, no experience is necessary. Click on the link highlighted above and choose "Events."

Walnut Wilt

Tomato, potato, blackberry, apple, lilac, asparagus, chrysanthemum, peony, and other herbaceous and woody plants can be afflicted with a disorder known as walnut wilt. Other plants, such as black raspberry, corn, bean, carrot, dandelion, and zinnia are resistant. This malady is associated with root uptake of a chemical called juglone that is produced by several species of trees in the walnut family, including black walnut, Persian walnut, butternut, and pecan with black walnut producing juglone in the highest amounts. Juglone is formed in the leaves, fruit hulls, inner bark, and roots of the walnut and is leached or released into the soil. This chemical has fungicidal and insecticidal properties. It also is quite toxic to many plant species and induces wilting and stunting. The ability of plants to produce and release chemicals that are toxic to other plants is called allelopthy. The severity of the juglone toxicity partly depends on the proximity of the plants to a walnut tree.

Generally, tomatoes growing next to a walnut tree abruptly wilt and die in early to mid-summer. Those plants growing a short distance away may not be killed but become flaccid and stunted. The woody stem tissue of affected plants turns brown. The symptoms of walnut wilt closely resemble those of Fusarium and Verticillium wilt, but the disorder may be distinguished from the other wilts by the constant association of walnut trees with the wilting symptoms.

Juglone may be leached from leaves and nuts into the soil during rain or released from roots. The chemical is highly reactive and quickly inactivated in the soil. The major uptake of the toxin occurs when tomato roots make contact with the roots of the walnut.

Tomatoes or other susceptible plants should not be grown near black walnut or other trees that produce juglone. The removal of walnut trees may not have an immediate effect because the toxin can persist in the inner bark of roots for several years. Do not plant tomatoes for at least two years after removing walnuts. (Ward Upham)

Colorado Potato Beetle

Overwintering females usually emerge in late April and lay a cluster of bright, yellow eggs on recently emerged potato plants. Larvae mature in about 3 weeks and pupate in the soil. After another 10 days, adult beetles emerge, mate and lay more eggs.

Both larvae and adults of this insect feed on potato (as well as tomato, eggplant, and pepper), causing extensive loss of foliage and reducing yields. Control strategies are varied and include:

Hand picking: Useful for small gardens where plants can be checked a couple of times a week. Dropping beetles and larvae in a container of soapy water will lead to their demise.

Floating row cover: This material can be placed over the planting and act as a physical barrier to the insects. Be sure to seal the edges. It is sometimes suggested to leave the floating row cover in place during the growing season because potatoes do not need to be pollinated to produce tubers. Often, this is not practical because it interferes with weed control.

Insecticides: A number of products are registered including spinosad (Captain Jack's Dead Bug Brew, Bonide Colorado Potato Beetle Beater Concentrate, Monterey Garden Insect Spray) and permethrin (Eight Vegetable, Fruit & Flower Concentrate, Hi Yield Garden and Farm Insect Control). (Ward Upham)

Remove Blossoms on Newly Planted Strawberries

Spring-bearing strawberry plants that were set out this spring should have blossoms pinched off. New plants have a limited amount of energy. If blossoms remain on the plants, energy that should go to runner development is used to mature fruit instead. Plants that are allowed to fruit will eventually produce runners, but those runners will not be strong enough to produce a good crop of berries the following year. For an adequate strawberry plant population and a good crop next year, early runner development is necessary. Early runners will produce far more strawberries than runners that form later in the season.

Newly planted everbearing plants also should have fruits removed for the first 4 to 6 weeks after planting so they develop a strong root system. (Ward Upham)

Thinning Excess Fruit

An overabundance of fruit on a tree may seem like a good thing, but too many fruit can cause problems that should be alleviated by removing the excess (thinning). For example, a heavy fruit crop can interfere with fruit bud development this summer. This can result in a small to no crop next year. This problem most often appears with apples. Thus, thinning helps ensure that good crops are produced each year.

The second benefit of thinning is to promote larger fruit on this year's crop. Fruit trees are limited in how many fruit they can mature. Too many fruit and fruit size and quality goes down.

A third problem often caused by too many fruit is limb damage. Sometimes the weight of a maturing fruit crop can literally break branches. This is especially common with peaches as peaches only bear fruit on last year's growth which is on the tips of branches. Thinning will help limit weight and preserve branches.

So how much thinning should we do? Thinning recommendations vary with the type of tree.

Apples and pears: 6 to 8 inches apart. Apples tend to produce fruit in clusters of five. We usually remove all the fruit in a cluster but one. Leave the largest, nicest fruit in the cluster. However, there are times you must remove perfect apples.

Peaches: 6 to 8 inches apart. Peaches tend to cluster together. As long as the average is about 7 inches apart, you will be fine.

Plums and prunes: 4 to 5 inches apart;

Apricots: 2 to 4 inches between fruit.

These are averages and so you may have several fruit clustered closer than this distance. As long as the average on the branch is close to the recommended spacing, the fruit should size well.

Thinning can be done by snapping them off by hand or by cutting them off. If snapping them off by hand, support the fruit stem with your thumb and forefinger and use your other fingers to snap them off. This can be done with one hand with a little practice.

Cherries are not thinned and can produce a full fruit load. (Ward Upham)

Helping Roundup (Glyphosate) Products Be More Effective

Though glyphosate products (Roundup, Killzall, Pronto Weed & Grass Killer) are non-selective and will kill most plants the spray contacts, these herbicides are not taken up by the roots of nearby desirable plants. This is because the active ingredient is neutralized when it contacts the soil due to being tightly bound to soil particles. Unfortunately, this binding effect can also take place in hard water that is high in magnesium and calcium, which reduces its effectiveness. To avoid this, mix ammonium sulfate with your spray water before adding the glyphosate product. The ammonium sulfate ions tie up the calcium and magnesium ions so that the glyphosate remains at full strength. Also some of the glyphosate will form a compound with the ammonium that weeds will more readily absorb, thus increasing effectiveness.

Note that this binding effect takes place in hard to very hard water (above 7 grains or above 120 ppm). Adding ammonium sulfate to softer water will not help. So if you have

your water tested and find you have hard water, how much ammonium sulfate should you add? As a general rule, add 8.5 pounds per 100 gallons. This would equal about 1.4 ounces per gallon or four tablespoons per gallon. (Ward Upham)

Time to Fertilize Warm-Season Grasses

June is the time to fertilize warm-season lawn grasses such as bermudagrass, buffalograss, and zoysiagrass. These species all thrive in warmer summer weather, so this is the time they respond best to fertilization. The most important nutrient is nitrogen (N), and these three species need it in varying amounts.

Bermudagrass requires the most nitrogen. Bermudagrass used on athletic fields needs about 4 lbs. nitrogen per 1,000 sq. ft. during the season. High-quality home lawns are often given 3 pounds per 1000 square feet and low maintenance areas can get by on 2 lbs.. Apply this as separate applications, about 4 weeks apart consisting of 1 lb. N per 1,000 sq. ft. starting in early May for athletic fields. It is already too late for the May application, but the June application is just around the corner. The nitrogen can come from either a quick- or slow-release source. So any lawn fertilizer will work. Plan the last application for no later than August 15. This helps ensure the bermudagrass is not overstimulated, making it susceptible to winter-kill.

Zoysiagrass grows more slowly than bermudagrass and is prone to develop thatch. Consequently, it does not need as much nitrogen. In fact, too much is worse than too little. One and one-half to 2 pounds N per 1,000 sq. ft. during the season is sufficient. Split the total in two and apply once in early June and again around mid-July. Slow-release nitrogen is preferable but quick-release is acceptable. Slow-release nitrogen is sometimes listed as "slowly available" or "water insoluble."

Buffalograss requires the least nitrogen of all lawn species commonly grown in Kansas. It will survive and persist with no supplemental nitrogen, but giving it one lb. N per 1,000 sq. ft. will improve color and density. This application should be made in early June. For a little darker color, fertilize it as described for zoysiagrass in the previous paragraph, but do not apply more than a total of 2 lb. N per 1,000 sq. ft. in one season. As with zoysia, slow-release nitrogen is preferable, but fast-release is also OK. As for all turfgrasses, phosphorus and potassium are best applied according to soil test results because many soils already have adequate amounts of these nutrients for turfgrass growth. If you need to apply phosphorus or potassium, it is best to core aerate beforehand to ensure the nutrients reach the roots. (Ward Upham)