Preparing Your Garden for Planting

Daffodils, tulips and forsythias are in bloom, robins and other songbirds have appeared, and longer days are all signs that spring is finally here! After a long, cold winter most of us are ready for warm, sunny days and many of us are ready for spring planting. Some have already planted early crops. I planted spinach, beets and lettuce on March 15 and will plant broccoli by the end of March or first week of April. The key to getting broccoli to form heads is to plant early. Do not wait until the weather has warmed into the high 70s to plant it. I always plant broccoli by the first week of April and am harvesting beautiful heads by late May. Other vegetables that can be planted early include carrots, potatoes, radishes, cauliflower, cabbage, various greens. If you are ready for some spring color, pansies and snapdragons are a good choice, as they will tolerate cooler weather.

There are some important steps to follow for another healthy and successful gardening season. If you haven’t done your winter cleanup rake your lawn to get rid of dead growth, leaves, twigs and winter debris and let light and air to the soil level, encouraging the grass to grow. Remove winter mulch and cut back hardy perennials such as coneflowers and black-eyed Susans as well as any others you may have. Cut back the dead foliage on chrysanthemums when new growth appears at the base. Cut back ornamental grasses to about 4-6 inches in the spring before growth resumes. When foliage is removed, spring growth will begin earlier. Old foliage left on the plant can delay the crown’s warming and subsequent growth by as much as 3 weeks. Prune roses in April and remove dead or damaged canes.

If winter freeze-thaw cycles heaved some of your plants out of the ground, replant as soon as you can. Resist the urge to start digging in your flower beds and garden too early. You can damage the soil’s structure. If you pick up a handful of soil, it should fall apart, not stick together like glue. When it’s dry enough, you can start to dig beds and add compost or manure in preparation for planting. Stay on top of the weeding now for a lot less work later. Some weeds such as the winter annuals like henbit and chickweed start growing early, so when you spot them, pull them out because they are easier to pull while their roots are still shallow in early spring. Chickweed and henbit are two of the earliest and most common weeds that you will find in your garden and flower beds this time of the year.

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If you didn’t have your mower blades sharpened this winter, or your mower or tiller still needs a tune-up, you should get this done right away. If you plan to take the mower or tiller to a garden center to be worked on, plan on several weeks before getting it back possibly, as most people wait until right up until they need it to have it worked on.

Remove tree guards or bur-lap winter protection from any young trees or shrubs. Do not leave tree wrap or guards in place over the summer. They keep rabbits and mice from nibbling on the bark over the winter, but trees don’t need them in the summer. They don’t allow enough air movement around the base of the trunk and that can promote rot of the bark. Insects can also get down inside the wraps and guards.

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**2014 ALL-AMERICA SELECTIONS**

All-America Selections is an independent, non-profit organization that tests new varieties then introduces only the best garden performers as AAS Winners. Judges look for significantly improved qualities such as earliness to bloom or harvest, disease or pest tolerance, novel colors or flavors, novel flower forms, total yield, length of flowering or harvest and overall performance. In the last ten years an entry needs to have at least two significantly improved qualities to be considered by judges for an AAS Award. The AAS Winners offer gardeners reliable new varieties that have proven their superior garden performance in Trial Grounds across North America, thus, our tagline of "Tested Nationally and Proven Locally®". When you purchase an AAS Winner, you know that it has been put through its paces by an independent, neutral trialing organization and has been judged by experts in their field. The AAS Winner label is like a stamp of approval.

For 2014, All-America Selections is recognizing both national and regional winners. As you plan your garden this spring, think about adding some of these 2014 All-America Selections winners.

**Petunia 'African Sunset' F1:** Plants will bloom from late spring to frost with orange flowers. The mounded spreading plants will grow 12 inches tall and spread up to 20 inches. Petunia 'African Sunset' F1 is good for containers or hanging baskets.

**Gaura 'Sparkle White':** Gaura 'Sparkle White' has long slender stems with a large number of dainty white flowers tinged with a pink blush. It loves full sun and is heat tolerant. 'Sparkle White' will bloom from late spring to frost.

**Penstemon 'Arabesque™ Red' F1:** This hybrid has red and white bicolor large bell-shaped flowers. It does best in full sun. It will attract butterflies and hummingbirds all summer. It will bloom from summer to frost. Penstemon 'Arabesque™ Red' F1 is heat tolerant.

**Sunflower 'Suntastic' F1:** This is a new dwarf sunflower growing 10 to 24 inches tall. It is great for containers. Each plant produces up to 20, 5 to 6-inch flowers per plant in three successive blooming periods. Sunflower 'Suntastic' F1 will bloom in 65 days from seed.

**Source:** http://www.all-americaselections.org/

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**FRIENDS IN THE GARDEN**

Friends of Athens (FOA), supporting the Battle of Athens State Historic Site, invites you to join “Friends in the Garden” at the Kelly and Jo Bryant home near Revere, Missouri on Saturday, June 21 from 1-5 pm. Go approximately three miles north of Revere on DD.

Jo and Kelly have a flower and vegetable garden spreading over several acres and are continually changing the landscape to the delight of visitors. FOA will have a sales table in the garden house with home-made items, plants and Athens tee-shirts. Light refreshments will be served. Donations will help FOA with education, assisting interpretation and provide funds for large projects such as interpretive panels and acquiring the 1868 church at Athens. Admission is a free will donation to FOA (Friends of Athens). Starting at 1:30 you can attend gardening sessions taught by local gardeners.

1:30-2:00—Sandy Stone: Native pollinators and the plants that attract them, and Steve Jervey: Blue bird boxes and attracting the birds to your garden

2:15-2:45—Vivian Perry: How to gather, press, and use flowers from your garden, and Jo Bryant: The herb garden: planning, planting, and using herbs.

3:00-3:30—Vivan and Sandy will repeat their sessions.

3:45-4:15—Steve and Jo will repeat their sessions.
I was asked by my friends at the local beekeeping club and some of our master gardener students, to address the issue of pesticide exposure avoidance for honey bees. The reason this article is appropriate now, is that planning ahead is essential to avoiding pesticide kills of honey bees. I reside in an area where agricultural pesticide use would be considered intense. Surrounded by 2.5 million acres of crop land where almost every acre is sprayed with at least one insecticide every season. Many acres have an application of fungicide and every acre receives multiple herbicide applications. You might assume that bees could not be kept here. That is not the case. Bees thrive here and produce a rich harvest of cotton and soybean nectar and pollen. What is the secret? Communication plays a major role in avoiding pesticide kills. Hobby beekeepers are usually located on the outskirts of a town, village or city. These locations may have truck crops, orchards or farms in the vicinity. Many of the bee kills I have seen were the result of a neighbor or the beekeeper spraying their own garden at the wrong time or in the wrong manner. There are ways to avoid a catastrophe. First, let everyone in your vicinity know that you have an apiary. Many cities have abandoned ordinances prohibiting honey bees. Beekeepers are becoming more common in urban areas. Pesticides are used more on golf courses than any farm. Pesticides are also used on lawns, trees and shrubs more often than on farms. Urban and suburban locations are dangerous for honey bees. These are also the most likely locations for hobby beekeepers. Enlist your neighbors help in keeping your bees healthy by reducing chemical exposure.

Most modern pesticides available over the counter are low toxicity chemistry for people. Many of these that are not insecticides are low toxicity to bees. Any herbicide available for general use and for sale at the garden center is not toxic to honey bees. Using the herbicide Roundup as an example of modern chemistry, it has extremely low toxicity to any living thing but plants. Chemical toxicity is measured in LD 50. That is Lethal Dose to 50% of the organisms tested. Roundup has an LD 50 of 10,000. That means it takes 10,000 milligrams per kilogram of body weight to cause a lethal effect. By comparison, table salt has an LD 50 of 3,000 and a bar of bath soap has an LD 50 of 2,000 (5 times more toxic than Roundup). None of these chemicals are dangerous to people. Only the soap is dangerous to bees. The most common insecticides available at the garden center are Malathion, Sevin, Permethrin / Cypermethrin, Acephate, and Spinosad. Only spinosad is considered "organic." All are toxic to bees. Sevin is the one that is likely to make it back to the hive. Sevin is rarely used on commercial farms that sell produce. It is used in gardens and golf courses. Malathion and Acephate are very volatile and do not last long in the environment after application. Permethrin and Cypermethrin kill bees on contact but once dried on the plant have little effect. Spinosad runs Sevin a close second as far as danger to bees. With proper timing all of these compounds can be used with little danger to bees.

If your neighbors know the location of your apiary they can avoid spraying it directly. The wind blows when the sun is up in the sky but not at dusk and dawn. Bees are active when the sun is up but not at dusk and dawn. If insecticides are applied at dusk, they have all night to dry on or soak in becoming little threat to bees. It is also good if neighbors do not spray insecticides when plants are in bloom. By not making applications when plants are in bloom and attractive and making applications to non-blooming plants at dusk I have managed to keep bees in this agriculture district for 30 years without pesticide kills. No farmer or applicator wants to kill your bees, talk with them. All of the insecticides listed above are no more toxic to you or your dog than a bar of soap. They pose little risk to anything but insects. Pesticide kills are rare here in the north Mississippi River Delta because growers and applicators have been taught when to time applications and avoid bee kills. It is an education problem. Now you know what needs to be done and you, oh best beloved, are the educator. Bee safety is nearly as important as people safety. Insecticides are needed and "organic" ones are also deadly to bees. Timing and communication are the keys to success in avoiding bee kills.
GARDEN TIPS FOR APRIL

VEGETABLES
• Start cucumber, cantaloupe, summer squash, and watermelon seeds indoors in peat pots. Finish sowing seeds of cool-season vegetables not yet planted outdoors.
• Flower stalks should be removed from rhubarb plants if they develop.

ORNAMENTALS

WEEKS 1-3:
• Winter mulches should be removed from roses.
• Shrubs and trees best planted or transplanted in the spring include butterfly bush, dogwood, Rose-of-Sharon, Black Gum, redbud, grapes, magnolia, tulip poplar, birch, gingko, hawthorn, and most oaks.
• Fertilize established roses once new growth is 2 inches long. Begin spraying for black spot disease.

WEEK 4:
• Easter lilies past blooming can be planted outdoors. Set the bulbs 2-3 inches deeper than they grew in the pot.
• Apply controls for holly leaf minor when the new leaves are just beginning to grow.
• Evergreen and deciduous hedges may be sheared. Prune the top narrower than the base so sunlight will reach the lower limbs.
• Prune spring flowering ornamentals after they finish blooming.

FRUIT-ALL MONTH:
• Blemish-free fruits that are unmarred by insect or disease injury can rarely be produced without relying on regular applications of insecticides and fungicides. For specific information, see MU guidesheet G6010, Home Fruit Spray Schedule.
• Plant bare-root or potted fruit trees as soon as soil can be worked.
• Remove tree wraps from trees now.
• Prune peaches and nectarines now.
• Leaf rollers are active on apple trees. Control as needed. Spider mites and codling moths become active on apples.
• Stink bugs and tarnished plant bugs become active on peaches.
• Destroy and prune off webs of eastern tent caterpillar.
• Protect bees and other pollinating insects. Do not spray insecticides on fruit trees that are blooming.
• Begin sprays for fireblight susceptible apples and pears using an agricultural streptomycin.

LAWN & TURF
• Start mowing cool season grasses at recommended heights.
• Aerate turf if thatch is heavy or if soil is compacted.
• Topdress low spots and finish over-seeding thin or bare patches.
• Apply crabgrass preventers before April 15. Do not apply to areas that will be seeded.

MISCELLANEOUS:
• Termites begin swarming. Termites can be distinguished from ants by their thick waists and straight antennae. Ants have slender waists and elbowed antennae.
• Honeybees are swarming. Wasp and hornet queens begin nesting.
• Hummingbirds return from their winter home in Central America.

- MISSOURI BOTANICAL GARDEN -