

TIME TO PLANT SPRING-FLOWERING BULBS

Late September through October is an excellent time to plant spring-flowering bulbs such as crocus, tulips, and daffodils. These plants need to develop roots in the fall and must meet a chilling requirement over the winter in order to bloom in the spring. Choose a planting site that has full sun to partial shade. The ideal soil would be a sandy loam, but even poor soils can be used if organic material such as peat moss, compost, or aged bark is mixed in. For example, a heavy clay can be amended by mixing in one-third to one-half organic material. Soil pH should be between 6.0 and 7.0. Bulbs need good aeration as well as good drainage for proper development. It is best if the bulbs are given 12 inches of prepared soil. If one-third organic material were added, this would require mixing 4 inches of organic material with 8 inches of soil. Incorporate about 3 pounds of a complete fertilizer such as a 5-10-5 per 100 square feet during preparation or fertilize according to soil test. Planting depths vary depending on the size of the bulbs. For example, tulips and hyacinths are set about 6 inches deep, and daffodils are put 6 to 8 inches deep. Smaller bulbs are planted shallower. As a rule of thumb, bulbs are planted two to three times as deep as their width. Planting depth is the distance from the bottom of the bulb to the top of the soil. Large bulbs are normally spaced 4 to 6 inches apart, and small bulbs about 1 to 2 inches. Planting in clumps or irregular masses produces a better display than planting singly. After placing the bulbs at the proper depth, replace half the soil and add water. This will settle the soil around the bulbs and provide good bulb/soil contact. Add the remaining soil and water again. Although there will be no top growth in the fall, the roots are developing, so soil needs to be kept moist but not wet. Mulch can be added after the soil has frozen to prevent small bulbs from being heaved out of the soil by alternate freezing and thawing.

Twig Girdler

If you look at a twig girdler, you can see that it is well-equipped for the girdling task. The head is compressed from front to back, and somewhat elongate from top to bottom ---- just right for allowing it to fit into the V-shaped girdle it creates. Under magnification, their mandibles resemble the "jaws-of-life" rescue equipment ---- stout and strong, ready to cut/girdle branches ranging in size from 6 to 13 mm in diameter. Depending on the size of the individual female beetle whose legs are uniquely positioned, her 4 front legs encircle/grasp and her hind legs are positioned rearward and utilized to anchor against. The girdling process is not a complete shearing of branches. Rather, the smooth cut stops, but an intact central core remains, thus preventing the branch from dropping. However, because girdling severs vascular elements, the portion of the branch beyond the girdle dies and dries out. This results in the central core becoming brittle. It is at this point the weight of the branch (with or without the aid of the wind) overcomes the ability of the core to support the branch. The core snaps and the branch falls to the ground. Twig girdlers have a wide host range including hickory, pecan, dogwood, honeylocust, oak, maple and hackberry. While hackberry is listed as "high" on the list of hosts, in Kansas, most reports of littered lawns occur beneath elms. This preference for elm over hackberry was exemplified in an observation of side-by-side girdled elms and untouched hackberry trees. For homeowners, twig girdlers are more of a nuisance in causing the aforementioned branch litter. The recommendation is to gather up and dispose of branches. This will eliminate those beetles which emerge the following year. However, this does not mean that twig girdlers won't appear the following year. Look up and you may see many more dead branches still attached or caught up in tree canopies.

Why Do Houseplants Lose Leaves After Being Brought Inside?

Newly bought houseplants or those brought in from outside often lose their leaves. In order to understand why this occurs, we need to look at how these plants are grown and what the plant needs to do to adapt to its new environment. Houseplants are normally produced either under shade outdoors in southern states or in greenhouses. Also, many homeowners move their houseplants outside during the summer. Regardless, the plants receive much more sunlight than they do in an indoor environment. Research done in Florida in the late 1970s revealed that tropical plants grown under high light conditions produce "sun leaves" while those grown under low light conditions have "shade leaves." These leaf types differ structurally in that sun leaves have less

chlorophyll (the substance that plants use to convert sunlight to energy) and the chlorophyll that is present is located deeper inside the leaf. Sun leaves also tend to be thick, small and numerous while shade leaves are more thin, larger, and fewer in number. When plants are moved from one light condition to another they need time to adjust. This process is known as acclimatization. If they are forced to acclimatize too quickly, they will drop their sun leaves and produce a new set of shade leaves. If the acclimatization process is slower and less drastic, the plant can convert their sun leaves to the shade leaves that do better under low light. If going from shade to sun, this process is reversed. Some houseplants are acclimatized before they are sold but many are not. So how do we help our new houseplants or those moved inside acclimatize to their new home environment? Houseplants should start out in an area of the home that receives plenty of light and then gradually moved to their permanent, darker location. This process should take 4 to 8 weeks depending on the degree of difference in light levels between the initial and final location of the plant. Remember, plants need to be acclimatized whether they are moved from a sunny location to one that receives less light or from shade to sun. Understanding plant processes allows us to anticipate potential problems. Acclimatization gives our houseplants a greater chance of retaining leaves and avoiding the stress of completely replacing them.

Rotation of Vegetable Crops

Rotating vegetable crops is a standard way of helping prevent disease from being carried over from one year to the next. Rotation means that crops are moved to different areas of the garden each year. Planting the same crop, or a related crop, in the same area each year can lead to a build-up of disease. Also, different crops vary in the depth and density of the root system as well as extract different levels of nutrients. As a rule, cool-season crops such as cabbage, peas, lettuce and onions have relatively sparse, shallow root systems and warm-season crops such as tomatoes, peppers and melons have deeper, better developed root systems. Therefore, it can be helpful to rotate warm-season and cool-season crops. As mentioned earlier, it is also a good idea to avoid planting closely related crops in the same area as diseases may be shared among them. For example, tomatoes, potatoes, peppers and eggplant are closely related. Also, broccoli, cauliflower, cabbage and brussels sprouts share many characteristics in common. Therefore, do not plant cabbage where broccoli was the previous year or tomatoes where the peppers were.

So, why is this important to bring this up in the fall? Now is the time to make a sketch of your garden so that the layout is not forgotten when it is time to plant next year.