Bulbs provide a good investment for money spent and supply years of spring color in your yard. Fall is the prime time for planting of hardy spring flowering bulbs. Most bulbs can be planted until the ground is frozen.

**Preparing Soil**

Properly preparing the soil for bulb planting is important. Good soil drainage is essential in raising bulbs. If you have a soil with a high clay content, it can be improved by adding compost, peat moss or some other source of organic material. The organic material should be worked in the top twelve inches of soil (eighteen inches is even better).

**When to Plant**

Spring flowering bulbs should be planted in the fall when night temperatures on an average cool to near 50. In this area this is usually late September or early October. Proper storage is important since spring flowering bulbs usually have already developed within the bulb next years flowers. Until you are ready to plant the bulbs, store the bulbs in a cool and dry area and do not expose to sunlight. Never store in garage since fumes from car exhaust will prevent the bulbs from flowering. Most spring flowering bulbs can be planted as late as mid December in this area provided that the soil is not frozen. Later planted bulbs are normally shorter growing than earlier planed bulbs.

Spring flowering bulbs normally begin to form their roots in early November if planted by the first week of October. It is important that during the rooting process that the bulbs be kept well watered to encourage good root development and growth.

**Fertilization**

Spring and bulbs need phosphorous to encourage root development. Keep in mind that phosphorous moves very little once applied to the soil. Some bulbs are planted 6 to 8 inches deep. The phosphorus needs to be mixed in the soil below where the bulbs will be located so it can be utilized by the bulb roots. Mix bone meal or super phosphate with the soil in the lower part of the planting bed as it is being prepared. However be careful that the bone meal does not touch the bulbs or else the bulbs will be damaged.

If bulbs are going to be maintained in a planting bed more than one year, it is important to supply additional fertilizer in the spring. Additional fertilizer is not necessary when planting in the fall outside of the application of phosphorus. As soon as the shoots break through the ground in the spring, the gardener should apply a 10-10-10 soluble fertilizer (or equivalent bulb fertilizer) plus two cups of bone meal per ten square foot area. Do not fertilize spring flowering bulbs after they have started flowering. This tends to encourage the development of bulb rot.
Planting Location

Before selecting the location to plant bulbs in the landscape, consider the light requirements of the plant. Does the plant require full sunshine, partial shade or full shade? Since early spring bulbs bloom before most trees or shrubs leaf out, they can successfully be planted under trees and shrubs. Many summer blooming bulbs require full sun or partial shade.

Spring bulbs planted on a south slope will bloom earlier than the same bulbs planted on a north slope. Spring bulbs planted on a hillside will bloom earlier than bulbs planted in a valley. Cold air is heavier than warm air and behaves like water. It flows down the slope, settling in the low areas.

Planting Depth

The general rule of thumb for planting spring bulbs is to plant two to three times as deep as the bulbs is tall. This means most large bulbs like tulips or daffodils will be planted about 8 inches deep while smaller bulbs will be planted 3-4 inches deep. Planting depth is measured from the bottom of the bulb. This rule of thumb on planting depth does not apply to summer bulbs which have varied planting requirements. For planting depth of summer bulbs, consult the information supplied with the bulbs.

Tulips, daffodils and hyacinths should be planted with the nose of the bulb upward and the root plate downward. The best method of planting is to dig and loosen the entire bed to the proper depth. Press the bulbs into the soil in the planting area and cover with soil. Because the soil in a spaded bed is better drained and prepared, the planting will last longer. This method of planting is preferred over trying to plant bulbs one by one with a bulb planter. In many soils bulb planters do not work well, if at all.

Some gardeners claim that planting tulip bulbs deeper encourages the bulbs to perennialize or come back year after year. However the ability for tulips to perennialize a lot of times depends on the particular variety and the soil and climatic conditions.

Watering Bulbs

Water the bulbs following planting. This will help settle the soil in the planting bed plus provide needed moisture for the bulbs to start rooting. Fall planted bulbs must root before cold weather. Avoid over-watering at planting time since this can result in bulb rot.

For both spring and summer bulbs, start watering when the flower buds first appear on the plant if the soil is dry. Shallow watering will not do the job. Remember that the bulbs may have been planted 6 to 8 inches deep and the water needs to soak to that depth. Through the bud, bloom and early foliage stage, add about one inch of water per week if this amount has not been supplied from rainfall. Water with a soaker hose to keep water off the bloom. Bulbs like alliums, or the shallow planted bulbs, will rot quickly if over-watered in the heat of summer.

Mowing Foliage
One of the visual problems with spring bulbs is the foliage that remains after bloom. The foliage can become unsightly if the bulbs are planted in a public area of the landscape. Foliage should not be mowed off until it turns yellow and dies back naturally.

The foliage on the smaller bulbs such as snowdrops and squill will die back rapidly and cause little problem. The foliage on the larger bulbs like tulips and daffodils will take several weeks to die back. Keep in mind that after flowering, the plant needs the green leaves to manufacture food (photosynthesis) that is stored in the bulb for next year’s growth. If the homeowner mows off the foliage early, the plant can no longer manufacture nutrient reserves for next year. This results in a small, weak bulb which will gradually decline and die out.

There are several ways to divert attention from the yellowing bulb foliage. Interplant the bulbs in the spring using one or two colors of annuals. Place bulbs behind the plants on the front edge of a border planting. Plant taller flowering bulbs behind lower growing foreground shrubs. Plant bulbs with groundcovers and perennials like hosta or daylilies.

Digging and Storing Spring Bulbs

Once the foliage dies back or matures in the late spring or early summer, the bulb is dormant. Summer is the dormant period for spring bulbs. As the foliage dies back, the roots that nourish the bulbs also die back. With fall rains, the bulb comes out of summer dormancy and roots begin to grow again to provide the bulb nutrients and moisture.

Once the spring bulbs enter dormancy, the time is right to dig the bulbs if needed. Some bulbs benefit from digging to divide the bulbs and spread them out over the bed.

If the choice is to dig bulbs, they should be stored in a well ventilated place and replanted in the fall. Every five years daffodils and crocus should be dug and replanted to prevent overcrowding. The first sign of overcrowding will be a decrease in the flower size, uneven bloom and uneven plant height. When this occurs, dig, spread bulbs out and replant immediately.

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