

# Walden Landscape Notes: Perennials and Bulbs

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Hello Walden Homeowners. The 4<sup>th</sup> class given by Colorado State University covered Perennials and Bulbs, and was given by (2) instructors who were very well versed on the subject matter. If you are one of those 'Lazy Gardner's' who like to enjoy their yard rather than spend time working on it, then Perennials and Bulbs are the plants for you. Most Perennials and Bulbs can stay in the ground over the winter, and wake up from their long nap ready to grow and bloom. What could be easier.

## **Our Environment**

As I have said in previous Landscape Notes, our homes were built in a semi-arid, desert like, soil base. Yet there are many plants, including those species native to Colorado, that enjoy these conditions. To help you navigate through all the information available, I have consolidate all the Garden Notes and Fact Sheets into one publication called 'Resource Notes'. Many of the Fact Sheets and Garden Notes have active links that will take you directly to the information. For example, the Fact Sheet on Perennial and Bulb selections will show you, Bloom times, safe elevations, etc.

## **Reviewing the Basics**

Plants derive all their needs from the soil they live in and most plant root structures reside in the top 12" inches of soil. That is why it is important to keep the soil loamy so air can circulate among the root structures. Loamy soil will also hold water better, but be careful not to overwater. There are layers of clay below the loam that pass water slower, thus creating the potential pool of moisture causing root rot. Next, don't over feed, especially with blooming plants. If you do, the only result you will get will be more leaves and smaller flowers.

In the Soil Landscape Notes we discussed 'Tilth', which is the makeup of the soil. By adding Amendments we can improve our tilth. These Amendments come in two ways; Organic, which improves the soil structure, and Fertilizer, which adds nutrients to the soil.

Ground covers come in a variety of makes. Most popular are the Bark Mulches. They keep moisture in the soil thus requiring less water cycles, and decompose slowly. As they decompose, they add Organic matter to the soil tilth. Gorilla Hair and products like this are very resistant to winds, so on a gusty day you will not lose your ground cover. Rock is great for Xeriscape projects but will hold heat keeping the soil warmer. Cool soils are better for growing flowers plus you do not want your bulbs pushing their way through rock to get to the sunlight. Bark Mulch is a much easier way for Bulbs or Perennials to navigate their way to the surface.

## **Let's Talk Perennials First**

What is a Perennial? Wikipedia defines a **perennial plant** or simply **perennial** (from Latin *per*, meaning "through", and *annus*, meaning "year") as a plant that lives for more than two years. The term is often used to differentiate a plant from shorter-lived annuals and biennials. We class Perennials into (2) groups, Herbaceous Perennials are plants that grow and bloom over the spring and summer, die back every autumn and winter, and then return in the spring from their root-stock. There is also a class of

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woody (like shrubs and trees), or non-herbaceous perennials which retain a mantle of leaves throughout the year, and a intermediate class of plants which retain a woody structure in winter

Perennial plants can be short-lived (only a few years) or they can be long-lived, as are some woody plants like trees. They include a wide assortment of plant groups from ferns and liverworts to the highly diverse flowering plants like orchids and grasses. They typically grow structures that allow them to adapt to living from one year to the next through a form of vegetative reproduction rather than seeding. These structures include bulbs, tubers, woody crowns, rhizomes plus others.

### **Planting and Transplanting Perennials**

Perennials can be purchased in a number of ways. The most common way is plants in a quart, one or two gallon containers. These plants are already growing and afford the gardener the flexibility to select and plant through the growing season. Another way is bare root or packaged plants. These are obtained through mail order or at garden centers and are sold as dormant material and are available for spring planting only. If these materials are received at a time that they cannot be planted immediately, keep the plants cool and keep the roots moist. They can be held for several weeks this way, thus assuring their survival prior to planting.

Most perennials are best planted in the spring. However, with the availability of material in containers, the planting season often extends well into the summer and early fall with autumn planting continuing until the first of October. The earlier perennials are planted the better the root system will be when the plant enters the winter. Late fall plantings can sometimes result in frost heaving and loss of perennials.

Containerized perennials should be planted at the same depth they were grown in the container. Planting too high results in plants drying out and too low invites crown rots. Some perennials such as bleeding heart, iris and peony need shallow planting in order to flower properly. Containerized plants should be watered before planting and bare root perennials should be soaked in water for one hour prior to planting in order to rehydrate the plants.

Most perennials are transplanted in the spring as growth starts or in the late summer or early fall. It is usually best to wait until the plants have flowered and then cut back by half just prior to moving. If plants are moved out of season, they may need to be shaded for several days to allow them to recover.

### **Perennial Flower Selection**

Rather than cover each Perennial, I am going to reference some Fact Sheets that will help you with your plant decision making. These sheets are very helpful and give you design ideas, flower selection, color, height, water needs, bloom times, planting altitude, exposure, and helpful comments.

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Start out with **Fact Sheet 7.244 – Colorado Mountain Gardening Basics**. This will give you a good foundation for successful results. **Fact Sheet 7.402 – Perennial Gardening** expands on the Basics but the focus is on Perennial plants. Then we get to **Fact Sheet 7.242 – Native Herbaceous Perennials for Colorado Landscapes**. The plants described in this brochure are native to Colorado and very hearty for its climate. Where there are no pictures, look them up on the web to see if they will fit into your design scheme. Last sheet is **Fact Sheet 7.405 – Herbaceous Perennials**. It covers non-native plants that have adapted to Colorado growing conditions. Although they say these plants are for “Colorado’s Lower Elevations”, many of the plants in this sheet are ones that grow very well at 7,500 to 8,000 foot elevations. I am at 7,544 ft elevation and they grow fine in my garden.

### **Bulbs, Corms, and Roots**

Would you believe me if I told you the instructor for this class uses only Bulbs, Corms, and Roots to create a flower show in her garden that starts in early spring and lasts through mid-year? Well it’s true, but let’s also keep in mind that there is a different style of maintenance when you are working with these types of plants.

The term “bulb” refers to true bulbs and other bulb-like structures such as corms, tubers, tuberous roots and stems, and rhizomes. These structures are natural adaptations that store food to aid in the plant’s survival during unfavorably cold, hot, or droughty weather. There are bulbs for spring planting and bulbs for fall planting. It is usually noted on the bulb packaging what season to plant them in.

A greater selection of bulbs, corms and roots are available in early rather than late spring. Purchasing prepackaged material allows for convenient shopping also helps eliminate plant mix-ups. Packaging allows the consumer to see the bulbs. Purchasing from large bins allows the buyer to mix-and-match plant materials on an individual basis and allows the buyer to individualize a garden. But when buying bulbs from a bin you could get a wrong plant if you are not careful. Select only the largest and firmest bulb with no odor suggesting rot. The general idea is the larger the bulb, the larger the flower. Popular Spring Bulbs include Gladiolus, Dahlias, Canna, Lilies, and Allium.

September and October are the best months for planting fall bulbs. This will allow ample time for the bulbs to become well rooted before the ground freezes. Bulbs planted after October may not have time to root adequately and therefore may not flower uniformly in the spring. Freezing and thawing during the winter may also push an un-rooted bulb out of the ground. Consider mulching the bed to maintain a more consistent soil temperature. Your popular fall bulbs are Tulips, Hyacinth, Crocus, and Lily’s.

Last but most important, **“Read the Package or Label on the product.”** There are bulbs that require you to dig them up and store them after blooming. If you do not want that task, buy something different.

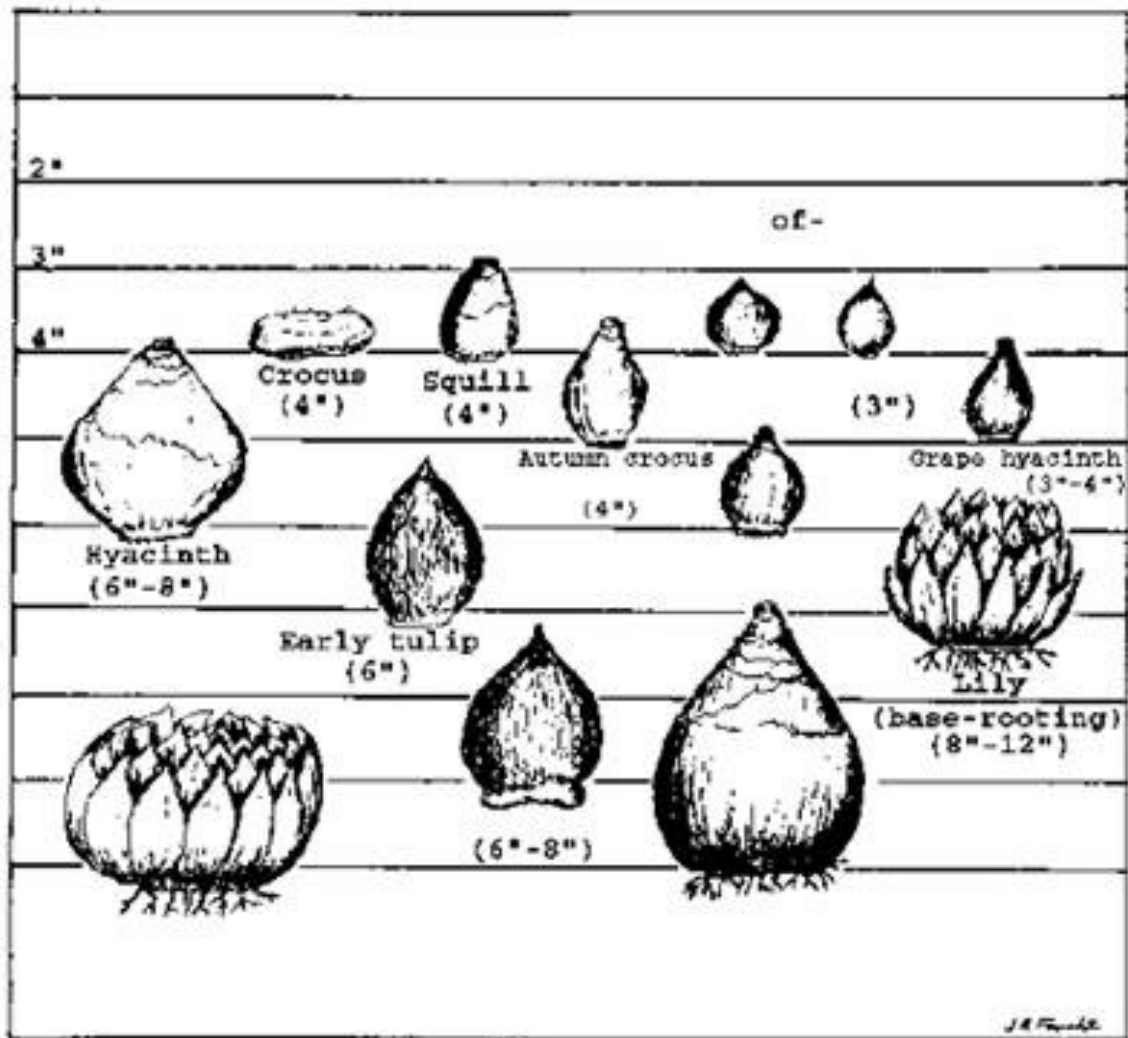
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### **Soil Preparation**

- Plan where you are going to put you bulbs before you start planting. A good plan will result in a beautiful setting of flowering plants that gradually color from early spring, to mid, to late spring.
- Bulbs are planted deeper than seed; therefore, soil preparation methods differ from those used elsewhere in the garden.
- According to the bulb-planting chart (Figure 1), all bulbs root below 4 inches. For fertilizer to be effective, it must be present in the vicinity of the roots.
- Excavate the bed to the bulbs' planting depth. Apply the fertilizer and soil amendments at this level, and spade or rototill the soil to a depth of 3 or 4 inches. Take care to not compact the soil beneath the bulbs, which will result in a hard pan with poor drainage. This will promote water logging.
- Aeration is the most important aspect of soil preparation. Before the soil is shoveled back into the bed, mix it with some type of organic matter. Space the bulbs as desired, refill the bed and water to settle the soil around the bulbs.
- The flower bud and the food necessary to produce the flower are present inside a bulb when it is planted. Fertilizer is applied to make larger bulbs the following year.
- Apply phosphorus fertilizer at planting time so it is available to the roots, because it does not translocate in the soil. Adequate phosphorus may be supplied with 1/2 pound of 0-46-0 fertilizer (treble super phosphate) per 100 square feet. Note that CSU research has shown that phosphorus from bone meal is only available to plants in soils that have a pH below 7. Bone meal is not regularly recommended for Colorado gardens.
- To improve the texture of the soil, add sphagnum peat moss or well-decomposed compost using up to one-third of the volume of soil removed from the bed as described. Soil amended in this way offers less resistance to the shoot as it emerges and provides better aeration and drainage for root growth. Soils that are high in clay should be heavily amended.

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Bulb Planting Chart. (Numbers in parentheses refer to minimum spacing.) Lilies normally are planted in the spring, while autumn crocuses normally are planted in midsummer. All other bulbs shown are planted in the fall. Planting depths are for well-drained soils. Bulbs do best in a sandy, clay loam. In heavier soils, plant 1 to 2 inches higher.

### Closing Comments

- Have a hot location? Try the perennial Gaillardia. They love hot sun and dry soil.
- Have a landscape plan for any bulb or flower planting.
- Read the label on the bulb package. Make sure you understand what bulbs can be trimmed back and left in the ground after blooming, and what bulbs need to be dug up and stored over the winter months.
- Enjoy the beauty that the bulbs bring to spring.