

A stylized tulip logo with an orange and black flower head, a green stem, and two green leaves. Two small blue leaves are positioned above the flower head.

*Spring, Bulbs*

Presented by The Backyard Gardeners

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# SPRING BULBS-GETTING STARTED

The term “bulb” is often used to apply to any plant that has the capacity to store food underground. This includes true bulbs (daffodil, tulip and lily), corms (crocus and gladiolus), tubers (anemone and caladium), tuberous roots (ranunculus and dahlia), and rhizomes (iris and canna). Although Holland is the current origin of many of today’s hybridized bulbs, most came from other locals. Lilies originated in China, Japan and North America, tulips originated in Turkey, amaryllis are from South America, fressias and callas are from South Africa, and daffodils came from Europe, North Africa and Asia.

## Selecting Bulbs

After determining variety and color preferences use the following criteria to select bulbs:

- Bloom time, plant height, spacing and light requirements
- Pick firm bulbs
- Pick larger, heavier bulbs
- Check for bulbs free of deep blemishes, cuts or soft spots

## General Planting Information

Plant bulbs as soon as possible. If you must delay planting, store them in a cool dry place (temperatures under 45° are ideal. Check individual bulbs for more specific information.) Temperatures over 70° will damage bulbs. Remove them from the plastic packaging and place them in mesh or paper bags or cartons filled with peat moss to allow ventilation.

Bulbs grow best in well drained soil. This can be achieved by adding organic material such as sand, peat moss or compost to clay soils and working it in to the top 12 inches of soil. Another method to consider in areas of poor drainage is creating raised beds. Place 2-3 inches of soil mixed with composted manure in the area, plant the bulbs, add 2-3 inches of sand and top with small gravel. Mulch with pine needles.

Consider the light requirements for any bulbs you plant. Most spring bulbs can be planted under deciduous trees since their bloom time occurs before the trees leaf out. Note that spring bulbs planted on the south side of your home will bloom earlier than others. Those planted on a hillside or slope will bloom earlier than in a valley since warm air rises. This is a fact Thomas Jefferson used

extensively in his garden planting.



### *Preparing the Soil*

The ideal pH range for optimum bulb growth is 6 to 7. Getting a soil test can determine if it is necessary to amend the soil. Soil test kits can be obtained from your extension service. Any amendments should be worked into the soil before planting. For optimum bud development, bone meal can be worked into the soil at the time of planting.

Prepare the sight as you would any planting bed. The best method is to cultivate the soil in the entire bed to the proper depth for planting. This provides better drainage and the bulbs will last longer than if planted with a bulb planter. Generally, bulbs are planted 2-3 times as deep as the bulb is tall. Planting depth is measured from the bottom of the bulb when it is placed in the hole. Check individual packages for more specific information. Spring-flowering bulbs must be planted in the fall in order to develop a good root system and to satisfy their cold requirement. In general, it is advisable to wait until the soil temperature is below 60°F at the optimal planting depth. The basic planting periods are:

- Zone 6: October
- Zones 7 and 8: November to early December

Remember-pointed end up!!! Plant spring bulbs such as tulips, daffodils and hyacinths with the growth tip up and the root plate down.

To achieve a formal look, lay your bulbs out before you dig. Choose the spots you would like and leave the bulb there to mark the spot while you dig the other holes. For a more natural look, gently toss the bulbs onto the area that you would like to plant in and then plant the bulbs where ever they land. Once planted, cover the bulbs and water well. This helps settle the soil and provide the moisture necessary to begin root development. Over over-watering at planting which can cause root rot. Water deeply to insure moisture reaches the root zone. Placing 2-3 inches of compost or other organic mulch over them will assist in minimizing temperature fluctuations and assist in maintaining an optimal moisture level. Do not mulch small, early blooming spring bulbs.



### *Fertilization*

Both spring and summer blooming bulbs need phosphorous to encourage root development. Since phosphorous is not mobile in the soil, it is necessary to mix it into the

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soil below the root level so it can be accessed by developing roots. Mixing in bone meal during bed preparation is appropriate.

If bulbs are going to be maintained in a planting bed more than one year, it is important to supply additional fertilizer. Spring flowering bulbs should have mixed into the soil in the fall five tablespoons of 10-10-10 soluble fertilizer (or equivalent bulb fertilizer) plus two cups of bonemeal per ten square foot area. As soon as the shoots break through the ground in the spring, repeat the above soluble fertilizer application. Do not fertilize spring flowering bulbs after they have started flowering. This tends to encourage the development of bulb rot and sometimes shortens the life of the flowers.

After the blooms have faded, deadhead flowers so the plants will not put their energy into making seeds. Foliage will begin to turn brown, but let it stay in place until it is completely dead. The leaves, while green, are manufacturing food (photosynthesis) that is stored in the bulb for next year's growth. If the foliage is removed early, the plant can no longer manufacture nutrient reserves for next year resulting in a small, weak bulb. Don't braid fading foliage to tidy up the garden because the lack of air circulation encourages fungal growth.

There are several ways to divert attention from the yellowing bulb foliage. Interplant the bulbs in the spring using 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 among groundcovers and perennials like hostas, day-lilies, or liriopes or plant with ground cover shrubs such as junipers and some cotoneasters.

Once the foliage dies back or matures in the late spring or early summer, the bulb is dormant. Once the spring bulbs enter dormancy, the time is right to dig the bulbs if needed. If you dig bulbs, store in a well ventilated place and replant in the fall. Every five years daffodils and crocus should be dug and replanted to prevent overcrowding. Signs 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.

## *Insects*

As a rule, most bulbs are insect free, however, several insects can attack them. Aphids, trips and mites are the most common offenders. Check your plants carefully and correctly identify the insect before applying any insecticide. Your local Extension Service can assist with

pest identification and recommend the proper course of treatment.

## *Animal Pests*

Gophers, voles, rabbits and deer will greatly appreciate your bulb planting efforts and are special fans of tulip and crocus. Narcissus are poisonous and will not be eaten, however they may be dug up or moved by many critters. The following are ways that may thwart animals from eating or carrying off your bulbs:

- Put sharp gravel around bulbs when planted
- Plant in chicken wire cages or plastic strawberry cartons
- Cover with fine wire mesh
- Clean up bulb debris
- Feed the squirrels in fall and winter
- Sprinkle mothballs, human or pet hair or pine needles sprinkled on the ground
- Mulch until the ground freezes-it can encourage pests to develop winter homes
- Use bulb dips like Bulb Guard or Ropel

Plant animal resistant bulbs such as Crocus, Common Snowdrop, Daffodil, Fritillaria, Muscari, Ornamental Onion, Hyacinth or Bluebells, Quamash, Oxalis, Star-of-Bethlehem, Spanish Bluebells, Squill or Scilla.

## *Diseases*

Most flowering bulbs are chosen for their ability to withstand diseases and perennialize, or flower or three or more consecutive years without being lifted. If evidence of disease is found, remove any infected foliage and infected bulbs as necessary.

Bulbs are a versatile addition to your garden landscape. They are easy to plant and will reward you for many years. They can be used as landscape plants, outdoor container plants, indoor plants or cut flowers. Many can be "forced" to provide winter color and fragrance. They are an outstanding companion plant and will certainly provide you with the first signs of Spring.

# Bulb Fact Sheets

## Daffodils, Jonquils

### Flowering Characteristics

- Flowers in early to late spring (Feb. to May) for 2-3 weeks,
- plants are 8-20 inches tall depending on cultivar

### General Characteristics

- Origin: Europe
- Common names: daffodils, jonquils
- Hardiness to 14° F when planted
- Primary uses: beds, woodland gardens, cut flowers, ground covers and rock gardens

### Cultural Information

- Planting density: 2-4 inches apart
- Planting depth: 8 inches to base of bulb
- Planting time: fall
- Perennialization habit: to Zone 3 with mulch, Zones 4-8 without mulch
- Light requirements: Full sunlight to PM or AM only sunlight
- Moisture: Tolerates summer drought, requires moisture during growing season
- Animal susceptibility: none

### Companion Plants

- Forsythia, Muscari, Lavender tulip cultivars, Vinca minor, Cotoneaster, Acer palmatum, Deutzia gracilis, Weigela

## Paperwhite Narcissus, Tazettas

### Flowering Characteristics

- Flowers in early winter (Dec./Jan.) for up to 100 days
- plants are 12-18 inches tall depending on cultivar and very fragrant

### General Characteristics

- Origin: Southern Europe
  - Common names: Paperwhite Narcissus, Tazettas
  - Hardiness to 35° F when planted
  - Primary uses: beds, rock gardens, cut flowers, and woodland gardens
- ### Cultural Information
- Planting density: 1-3 inches apart
  - Planting depth: 5 inches to base of bulb
  - Planting time: October-November
  - Perennialization habit: Zones 9-11 without mulch
  - Light requirements: Full sunlight to PM or AM only sunlight
  - Moisture: Tolerates (prefers) summer drought, requires moisture during growing season
  - Animal susceptibility: none

### Companion Plants

Forsythia, Jasminum nudiflorum, Vinca minor, Hammamelis

## Bulb Fact Sheets

### Lilies, Asiatic hybrid lilies

#### Flowering Characteristics

- Flowers in early summer (June/July) for 2-3 weeks,
- plants are 2-4 feet tall depending on cultivar

#### General Characteristics

- Origin: Hybrids from Asia, Europe and North America
- Common names: Lilies, Asiatic hybrid lilies
- Hardiness to 5° F when planted
- Primary uses: beds, sunny borders, and cut flowers

#### Cultural Information

- Planting density: 4-6 inches apart
- Planting depth: 8 inches to base of bulb
- Planting time: fall or spring
- Perennialization habit: to Zones 3 to 4 with mulch, Zones 5-9 without mulch
- Light requirements: Full sunlight to PM only sunlight
- Moisture: Tolerates some summer drought, requires moisture during growing season
- Animal susceptibility: not reported

#### Companion Plants

- Campanula, Coreopsis, Dianthus, Hemerocallis (yellow cultivars), Shasta daisies, Peonies (white and yellow cultivars), Rudbeckia, Salvia, Buddleia, Hibiscus syriacus, Acer palmatum

### Tulips

#### Flowering Characteristics

- Flowers in mid to late spring (April/May) for 2 weeks (per cultivar)
- Plants range from 6-24 inches tall.

#### General Characteristics

- Origin : Asia across to Mediterranean Region.
- Common name: Tulips
- Hardiness type: Injured at temperatures below 14 degrees F (-10C) when planted.
- Primary uses: Beds, sunny borders, rock gardens, and fresh cut flowers

#### Cultural Information

- Planting density: 1-3 inches apart, 9-20 per sq. ft.
- Planting depth: 8 inches to base of the bulb.
- Planting time: Fall
- Climatic zone habit: Zones 3 to 4 with mulch, Zones 5 to 7 without mulch.
- Light requirements: Full sunlight to PM only or AM only sunlight.
- Moisture: Tolerates summer drought, but requires moisture during growing season.
- Animal susceptibility: Susceptible

#### Companion Plants

- *Alyssum*, *Arabis*, *Centaurea dealbata*, *Coreopsis*, *Dianthus*, *Digitalis*, *Gypsophila paniculata*, *Hemerocallis*, *Iris*, *Kniphofia*, Peonies, *Verbascum*, *Rhododendron* spp, *Cotoneaster*, *Berberis*, *Acer palmatum*, *Deutzia gracilis*, *Weigela*.