

## Timely Tips Series

# Fall Bulbs

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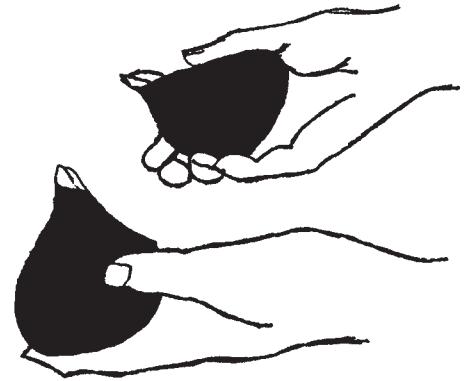
### Planting Fall Bulbs

Bulbs are an ever-increasing part of many spring gardens. To enjoy them in the spring, they must be planted in the fall. The term “bulb” is a general horticultural term which refers to all underground storage organs planted in the fall. To the botanist, daffodils and tulips have true “bulbs” like onions, crocus has “corms” and anemones have “rhizomes.” They are available during the fall months from retail and mail-order nurseries and mass merchants.

Mid-September until late October is the best time for bulb planting in north and central Arkansas. In south Arkansas, bulbs can be planted during the latter half of October until mid-December. The soil temperature should be between 40 and 60 degrees before planting. Should circumstances prevent planting at the optimum time, plantings may be made as late as the end of December throughout the state.

Buy bulbs that are firm, free of exterior blemishes and not shriveled. Bulbs are sold by grades based on size; hence, the larger bulbs are the most expensive and usually the best.

Besides grade, the newness of the particular cultivar (variety) can have a big impact on price. Older cultivars are common in the marketplace and are usually much less expensive than the new introductions. Frequently, the older selections are “tried and true” and will outperform newer and more expensive introductions.



**Figure 1. Select firm, blemish-free, top-size bulbs. Larger bulbs cost more but have bigger flowers.**

The adaptability of spring bulbs is one of the factors making them desirable in the flower garden. This adaptability permits their use in a wide variety of locations in the landscape. However, the one thing bulbs will not tolerate is poor drainage. If the proposed planting bed tends to stay wet, select another location.

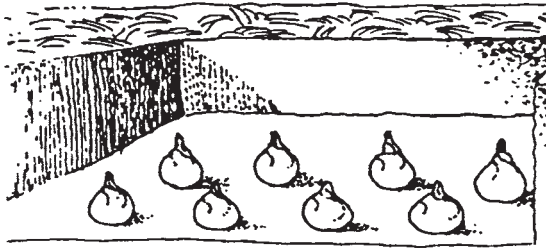
Bulbs should be given full sun if possible. This greatly improves their vigor and tends to increase their longevity in the garden. Daffodils, crocus and many of the minor bulbs tend to survive for years in the garden and, if given reasonable care, will establish themselves as permanent garden residents. Tulips, hyacinths and a few of the larger bulb species such as fritillaria tend to be short-lived and persist for only two to four years. A sunny, well-drained site and good care will extend their stay in the garden.

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## Planting Depth

Roots grow from the bottom of the bulb. If the entire planting bed is tilled, work the soil deeper than the bulbs will be planted. For plants such as tulips and daffodils, that means the bed must be worked at least 10 to 12 inches deep. To accomplish this, double digging is required. A layer of soil is removed from the planting bed. The bottom of the bed is then worked 6 inches deeper. Fertilizer and lime, if required, should be added to the bottom of the planting hole. Once the soil is prepared, space the bulbs in the bottom of the planting hole as shown in Figure 2.



**Figure 2. The best way to plant bulbs is to remove a top layer of soil first.**

This much work is not an absolute requirement to succeed with bulbs. Many gardeners prefer to simply dig a hole large enough to comfortably accommodate the bulb and leave it at that. This technique is the only practical way to plant bulbs when naturalizing them in a lawn setting.

Bulbs should be planted at the approximate depth shown in Figure 3 (on page 3). As a rule, bulbs are planted three times deeper than their diameter. This means that species with small bulbs, such as crocus and grape hyacinths, are planted 3 to 4 inches deep, while species with larger bulbs are planted 6 to 8 inches deep. Deeper planting is recommended by Dutch bulb producers as it improves the permanence of the bulb display. If drainage is suspect, deep planting may be harmful. Earlier recommendations specified planting at a much shallower depth than is used today. Application of an organic mulch such as shredded bark, pine bark or pine needles reduces the likelihood of a weed problem come spring.

## Bulb Spacing

To be effective in the landscape, plant bulbs in groupings large enough to have an effect. This usually means planting several dozen bulbs in a given location. Bed arrangements are best because they give a more pleasing effect. Avoid long, narrow rows. Plant small bulbs, such as crocus and grape hyacinths, 3 to 4 inches apart. Plant tulips and hyacinths 6 inches apart. Because they will always naturalize in the planting, plant daffodils 8 to

12 inches apart. When naturalizing daffodil or crocus bulbs in a lawn, use irregular bed layout and space a little wider than indicated above.

To determine the number of bulbs required for an area, begin by determining the number of square feet in the bed to be planted. Next, decide on the bulb spacing that will be used. Square the bulb spacing value and divide this into 144, the number of square inches in a square foot. This gives the number of bulbs needed per square foot of bed area. For example, suppose we need tulip bulbs for a bed 3 feet wide and 6 feet long. The tulips will be spaced 6 inches apart. The bed contains 18 square feet ( $3 \times 6 = 18$ ). Four bulbs will be needed per square foot [ $144/(6 \times 6) = 4$ ]. We would need 72 bulbs for the bed ( $18 \times 4 = 72$ ). A good display of bulbs requires enough to have an effect and attention to spacing.

## Fertilizing Bulbs

Fertilize bulbs at planting and then twice yearly thereafter. Bulbs do best when the soil pH is between 6.0 and 7.0. If the pH is lower, apply lime before planting. The University of Arkansas Cooperative Extension Service, with offices in every county, provides soil testing services. Be sure to allow two weeks for test results to get back to you.

At planting apply 6 pounds of bone meal or 4 pounds of super phosphate (0-20-0) to the bottom of the planting bed and incorporate completely. (If only individual planting holes are dug, incorporate a teaspoon full of bone meal in the soil at the bottom of each hole. This is not the best way, but it will work.) Position the bulbs at the desired spacing and then fill the planting hole. Apply 2 pounds of 13-13-13 per 100 square feet on the surface of the bed and water thoroughly. The surface application of complete fertilizer should be made each fall as long as the bulb planting persists. In the spring, just as the bulbs are beginning to break through the soil surface, apply an additional topdressing of 1 pound of 13-13-13 per 100 square feet of bed area. Fertilizer should not get trapped in the leaf whorl.

## Care After Blooming

Allow bulb foliage to “ripen” or mature naturally without disturbance. The time required depends on the species. Tulip foliage dies five to six weeks after flowering. Daffodil foliage may persist for 10 to 12 weeks. If the foliage is removed early, the bulbs will be smaller next year, thus reducing the beauty of the display. Techniques such as braiding the foliage, squashing it or trimming back should not be used. It is acceptable to plant annual bedding plants between the clumps of dying foliage.

# FALL PLANTING GUIDE FOR HOLLAND BULBS

EASY PLANTING FOR  
BEAUTIFUL SPRING BLOOM

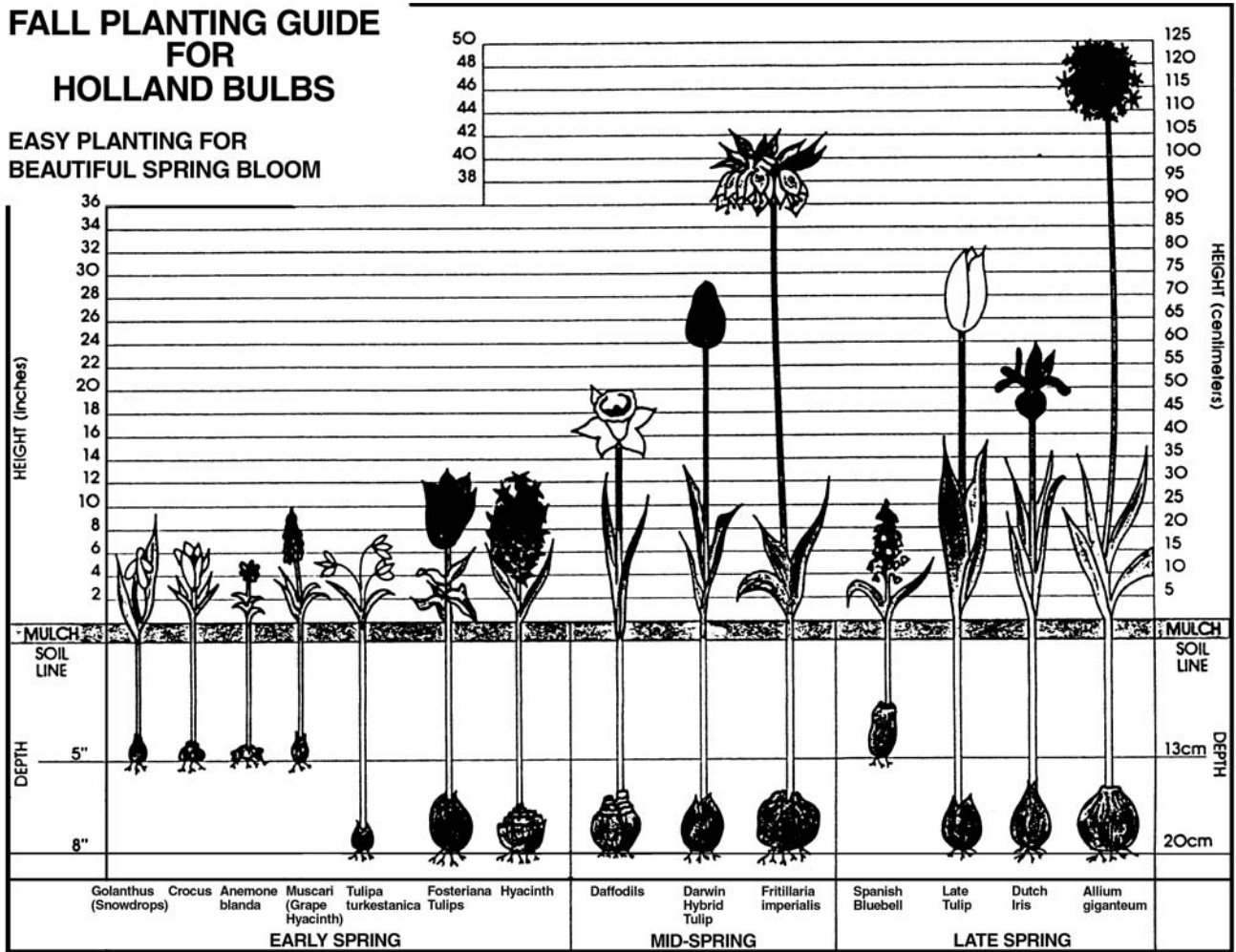


Figure 3. The recommended planting depth for spring bulbs according to Dutch Flower Bulb Institute research.

Daffodil bulbs naturalized in a lawn present a special problem with mowing. If the lawn is not mowed until the foliage dies naturally, the grass will be so tall that the neighbors will complain. Tests conducted in England have found that daffodils mown six weeks after flowering are as floriferous in future years as bulbs which were not mown until the foliage dies naturally. Chemical weed control should be limited to preemergence herbicide applications only.

Annual digging of tulip bulbs is sometimes referred to in old books on the subject. The only advantage to digging bulbs every year is to separate them according to size to give a more uniform bloom display. This is hardly ever warranted. Daffodils and crocus sometimes become crowded and require division every five to ten years to maintain their vigor.

## Daffodils

The most permanent bulb plant is the daffodil, which many people call "jonquil." Actually, the jonquil is a kind of daffodil with three or more small, fragrant, yellow flowers on each blooming stem.

Daffodils are the large, trumpet-shaped blooms with only one bloom per stem. Many hundreds of daffodil cultivars have been selected during the past centuries. Plants bloom from late February for the cyclamen flowered group to as late as early May for the beautiful, white poets narcissus. The common yellow daffodil usually blooms in mid to late March. Plant sizes range from 6 to 24 inches, depending on cultivar. Blooms are white, yellow, orange, pink or a combinations of these. The trumpet of the flower can vary from cup-like to a tube longer than the petals. Almost all cultivars do well in Arkansas. Barret Browning, Carlton, Geranium, Ice Follies and Unsurpassable have done well in trials.

## Tulips

A favorite flower with gardeners is the tulip. It is offered in almost every shade of the rainbow from dark blue-black to yellow and red. Plants bloom in early April, give or take a couple of weeks, depending on the cultivar, the weather and the part of the state. As beautiful as they are, tulips are not the most permanent addition to the flower garden. Most

selections will last two or three years, but by that time there will be many skips in the planting where bulbs have disappeared. Tulips are usually 12 to 20 inches tall. For optimum effect, they should be massed in the flower beds. To keep them healthy and happy as long as possible, fertilize as described in the section above. Of the tulip cultivars tested in a recent trial at the University of Arkansas, the bright red 'Oxford' was a standout. It persisted for over 10 years and bloomed every year without fail. None of the dozen other cultivars in the trial persisted beyond three years.

## Hyacinths

For gardeners interested in fragrance, the hyacinth is for them. These bulbous plants produce 12-inch tall blue, white, pink or yellow blooms which perfume the entire garden while in flower in early spring. In a well-drained site, they will persist for five years or even more, if fertilized regularly. Numerous cultivars are available with City of Haarlem (yellow), Carnegie (white), Delft Blue, Pink Perfection and Pink Pearl among the best. Hyacinths are among the easiest bulbs to flower in pots in the home. One bulb planted per four-inch pot provides fragrance for the entire home.

## Crocus

Like the daffodil, the crocus is a real survivor. It is available in shades of purple, blue and white. These are tiny plants usually only 4 to 6 inches tall. First blooms often appear through snow in late February. The Dutch hybrids bloom later, usually in early to mid-March. The dainty, sulfur yellow *Crocus chrysanthus* is one of the finest of this group of spring charmers.



Figure 4. The crocus is one of the most permanent spring bulbs.

## Bulbous Iris

Of the choice, persistent bloomers in the spring garden, few can compare with bulbous irises. These plants bloom in early March and vary in height from 6 inches tall to over 2 feet tall, depending on the species. *Iris danfordiae* reaches 6 inches in height and has light, sulfur yellow blooms with dark spots. *Iris reticulata* grows to 8 inches tall with dark violet or blue flowers with a yellow throat. Of the tall irises, the Dutch, Spanish and English irises are most common. These reach 2 feet in height and produce white, yellow or blue flowers in May. They are commonly seen in florist shops as cut flowers but are equally at home in the flower garden. Golden Harvest, Pacific Gold, White Excelsior, Wedgewood and Emperor are common selections.

Printed by University of Arkansas Cooperative Extension Service Printing Services.

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