# A BRIEF GUJDE TO GROWUNG AND <br> SMOWING 

DAPFODJLS


American Daffodil Society, Inc.

## THE AMERICAN DAFFODIL SOCIETY

The genesis of The American Daffodil Society was an article entitled "Who Will Join a Daffodil Society?" which Paul Frese, then editor of Popular Gardening, published in the October 1953 issue of that magazine. Organized activity in the growing and showing of daffodils until then was confined to the Maryland Daffodil Society, the Garden Club of Virginia and the Washington Daffodil Society. More than 400 responses were received and turned over to these groups to proceed with the details of creating a national society. A call went out to those who had expressed their interest to attend an organizational meeting to be held at Chery Chase, Maryland on April 9, 1954. On that occasion the Society was voted into existence and temporary officers elected. The organization of the Society was completed on January 22, 1955, when the Board of Directors elected Carey E. Quinn, president; Willis H. Wheeler, secretary and Mrs. William A. Bridges, treasurer. The Society was incorporated on February 20, 1958

The first annual meeting of the new Society was held in Washington D. C. in April 1956. It was highlighted by the only visit to this country of Guy L. Wilson who brought with him the first flowers seen here of his new seedling 'Empress of Ireland'. Similar meetings have been held each spring since, at sites ranging from Portland, Oregon to Atlanta, Georgia and from Hartford, Connecticut to Pasadena, California. The leadership of the Society is now recognized and the annual meetings attract visitors from many daffodil-growing countries such as Great Britain, Northern Ireland, Holland and New Zealand.

The first activity of the Society was a publication which over the years evolved from mimeographed sheets issued occasionally, through the small Daffodil Bulletin issued quarterly in conjunction with a yearbook and into The Daffodil Journal. It is a greatly enlarged quarterly now accepted as the leading publication of daffodil news and views from around the world. Currently, the Society also publishes the Tom D. Throckmorton Daffodil Data Bank and a condensed version, Daffodils to Show and Grow, both of which list the classification of daffodils. The Illustrated Data Bank is also available on CD-ROM for both Macintosh and IBM formats. Also, available from the ADS office is The Handbook for Growing, Exhibiting and Judging Daffodils and Miniature Daffodil Cultivars, A Guide to Identification Illustrated in Color.

A special concern of the Society has been to encourage the showing of daffodils by offering incentives such as awards to be offered at shows conforming to standards established by the Society. To attain uniformity in judging, schools are held at different locations and the services of graduates of the judging schools are required at shows that offer Society's awards. The most prestigious of the numerous show awards are the Carey E. Quinn Medal, the Harry I. Tuggle Memorial Trophy and the Roberta C. Watrous Medal. Hybridizers compete for the Grant and Amy Mitsch Trophy, the Larus Trophy, the ADS Challenge Trophy, the Murray Evans Award and the Goethe Link Medal. In addition the Society occasionally honors with special medals those who have served the Society with special distinction or those whose efforts have advanced the interest of the daffodil itself. The Society has led the way in obtaining recognition of the merits of miniature daffodils. Awards for Historic daffodils were offered for the first time to ADS shows in 1997.

A committee annually selects an outstanding garden daffodil to which the Wister Award is given and an outstanding exhibition daffodil whose hybridizer receives the Pannill Medal.

## SOME COMMONLY ASKED QUESTIONS

## What is the difference between a daffodil and a narcissus?

None. The two words are synonyms. Narcissus is the Latin or botanical name for all daffodils, just as llex is for hollies. Daffodil is the common name for all members of the genus Narcissus and its use is recommended by the ADS at all times other than in scientific writing.

## What is a jonquil?

In some parts of the country any yellow daffodil is called a jonquil, usually incorrectly. As a rule, but not always, jonquil species and hybrids are characterized by several yellow flowers, strong scent and rounded stem. The hybrids are confined to Division 7 and the term jonquil should be applied only to daffodils in Division 7 or species in Division 13 known to belong to the jonquil group.

## How many kinds of daffodils are there?

Botanists differ, but there are at least 25 species, some with a great many different forms and several natural hybrids. In addition to the species, the current printout of the Daffodil Data Bank lists over 13,000 hybrids that are divided among the thirteen divisions of the official classification

## Will squirrels and other rodents eat daffodil bulbs?

No. The bulbs and leaves contain poisonous crystals which only certain insects can eat with impunity. They may, however, dig up the bulbs.

## Are daffodils expensive?

Bulbs are priced from around $\$ 1.00$ to about $\$ 100.00$ depending on the newness or scarcity of a cultivar and not necessarily on its desirability. There are many prize-winning exhibition cultivars that can be bought for under $\$ 2.50$. Cultivars for naturalizing cost less, but mixtures of unnamed cultivars are not recommended

## How long do daffodil bulbs last?

Under good growing conditions, they should outlast any of us. While some kinds of bulbs tend to dwindle and die out, daffodils should increase.

## How long is the flowering season of daffodils?

From six weeks to six months, depending on where you live and the cultivars you grow.

## What are miniature daffodils?

Daffodils come in all sizes from five inch blooms on two foot stems to half-inch blooms on two inch stems. Largely for show purposes, but also for guidance in gardening, certain species and named cultivars have been determined by the ADS to be miniatures and must compete by themselves in daffodil shows. Current lists of miniature are published in The Daffodil Journal or may be obtained separately from the ADS

## Why should I exhibit at daffodil shows?

Most people exhibit for the satisfaction of helping to present to the public and other gardeners an outstanding display of a flower whose variety and merits are too little known. Shows will also give you a chance to see blooms of the newer cultivars and to become acquainted with others who share your interest in daffodils. Eventually your skill may be recognized by awards and you may wish to take the courses and examinations that would qualify you as an Accredited Judge.

## Are daffodils difficult to grow?

No. They are probably the easiest and most dependable of all the families of flowers and ideal for a beginner in gardening in most regions of the United States.

## Can daffodils be grown throughout the United States?

Daffodils are quite tolerant of cold, especially with a covering of snow, and are grown as far north as central Canada. The only exceptions are a few tender cultivars, usually azettas, such as the popular Paper White. Daffodils can also be grown throughout the South except for parts of Florida that are free of frost. A cold treatment, natural or induced, is needed for flower bud initiation. Along a narrow band adjoining the Gulf of Mexico from Florida to Texas there are certain types and named cultivars that have been found to do better than others

## How can I learn more about daffodils at home

By joining the ADS and by carefully reading The Daffodil Journal, by borrowing books on daffodils from the Society's Library, and by joining a round robin. There are a number of the latter, each consisting of ten members who contribute in turn letters relating their experiences and discussing problems that they have encountered or which others have raised

## Will daffodils grow in the shade?

They will grow in the shade of deciduous trees because they have finished flowering and the foliage has begun to mature by the time deciduous trees leaf out. However, it is better to grow them outside the drip line of deciduous trees rather than under them. Also, deciduous trees with tap roots are preferable to shallow-rooted trees. Daffodils will not survive long under evergreen trees and shrubs.

## Do ground covers have an adverse effect on daffodils?

The two will be competing for nutrients and moisture, so the answer depends on the fertility of the soil and the aggressiveness of the ground cover. Vigorous, tall-growing, and deeply rooting plants, such as pachysandra and ivy, are likely to discourage daffodils. However, they will usually do well in the company of shallow-rooted, trailing plants, such as myrtle, foamflower (Tiarella cordifolia), or creeping phlox (Phlox stolonifera)

## HISTORY AND CLASSIFICATION

Daffodils have a long history, but it was not until early in the 19th century that gardeners began to explore the possibilities of the species which travelers were bringing back to England from Spain and Portugal. The first crosses may have been those of Dean William Herbert who sought to prove that forms regarded as species were only natural hybrids that could be duplicated in the garden. His success inspired William Leeds, William Backhouse and others to hybridize for the purpose of creating better garden cultivars.

The seedlings of Leeds and Backhouse were eventually acquired by Peter Barr who classified them and other strains by using Latinized forms of the names of the hybirdizers such as Leedsii, Engleheartii, etc. Barr also induced the Royal Horticultural Society to call a conference on daffodils in 1884. In the fall of that year he issued the first of a series of catalogs describing and classifying the then known varieties and cultivars. The first conference encouraged others to begin hybirdizing and when a second conference was held in 1890 there was an impressive display of new cultivars.

Ban's catalogs served to classify all the existing cultivars until 1909 when the number of new cultivars and the interbreeding of Barr's once distinctive classes demanded an improved classification. A rudimentary form of the present classification was created by a committee in 1910. It has been modified a number of times.

The present classification consists of thirteen divisions. These divisions are based on the length of the corona or by evidence of the species' characteristics. The ADS has established a list of cultivars regarded as miniatures that may be shown only in classes specifically for these small flowers.

A Classified List of Daffodil names was first published in 1909 and new editions were published every few years. In 1977, the RHS approved a new classification that indicated the general physical structure of daffodils by their separation into division. Their further classification by color allows for a more accurate comparison of cultivars and also aids in forming a proper mental image of a particular daffodil bloom.

The ADS has published a useful book, Daffodils to Show and Grow, which lists daffodils introduced in the last twenty years and those daffodils from earlier years still to be met with in gardens, on the show bench or which are in commercial channels. The classification, color, breeder, season of bloom, height, fertility and date of registration are given for about 2,000 cultivars. Copies are available from ADS. A far more comprehensive list (including parentage and chromosome count if known) and description of species and cultivars is that created by the late Dr. Tom D. Throckmorton of Des Moines, Iowa and maintained by computer files, known as the Tom D. Throckmorton Daffodil Data Bank of the ADS. Print-outs may be had from the ADS. In 1996, thanks to the development work of Steve and Bob Vinisky, the ADS offered the Illustrated Data Bank for computer users on CD-ROM in both IBM compatible and Macintosh formats Thousands of photos are included

While the classification is really not very complicated, some beginners find it difficult to grasp. It is a. useful tool, however, because nearly all catalogs group or identify their offerings according to the classification and daffodil shows are organized on the basis of the classification. Acquaintance with it makes one realize that daffodils come in a wide range of shapes, colors and sizes and are not limited to the familiar yellow trumpet so often seen in florists' shops and supermarkets

ROYAL HORTICULTURAL SOCIETY SYSTEM OF CLASSIFICATION

For garden purposes, daffodils are classified in thirteen divisions. Division number indicates form, while letters indicate color. For example, 2 Y -YYO is a large-cupped daffodil, all yellow except for an orange rim; $1 \mathrm{~W}-\mathrm{Y}$ is a trumpet daffodil with white peri anth (petals) and yellow corona (rumpet).


## Division 1

Trumpet Daffodil
Cultivars
One flower to a stem; corona
(trumpet) as long as, or longer than, the perianth segments (petals)


Division 2
Large-cupped
Daffodil Cultivars
One flower to a stem; corona (cup) more than one-third but less than equal to the length of the perianth segments (petals)


Division 3
Small-cupped
Daffodil Cultivars
One flower to a stem; cojona (clip) not more than one-third the length of the perianth segments (petals)


Division 4 Double Daffodil Cultivars One or more flowers to a stem, with doubling of the perianth segments or the corona or both


## Division 5

Triandrus Daffodil Cultivars
Characteristics of N. triandrus predominant: usually two or more pendent flowers to a stem; perianth segments reflexed


## Division 6

 Cyclamineus Daffodil Cultivars Characteristics of $N$ cyclamineus clearly evident: one flower to a stem; perianth segments significantly reflexed; fiower at an acute angle to the stem, with à very short pedicel (neck)

Division 7 Jonquilla and Apodanthus Daffodil Cultivars Characteristics of Sections Jonquilla or Apodanthi clearly evident: one to five flowers to a stem; perianth segments spreading or reflexed; flowers usually fragrant

## Division 8

Tazetta Daffodil Cultivars
Characteristics of the $N$. tazetta group predominant: usually three to twenty flowers to a stout stem; leaves broad; perianth segments spreading, not reflexed; flowers fragrant


## Division 9

Poeticus Daffodil Cultivars Characteristics of the $N$. poeticus group
predominant: usually one flower to a stem; perianth segments pure white; corona usually discshaped, with a green or yellow center and a red rim; flowers fragrant

## Division 10

Bulbocodium Daffodil Cultivars


Characteristics of Section Bulbocodium clearly evident; usually one flower to a stem; perianth segments
insignificant compared with corona; filament and style are usually curved

## Division 11

Split Corona Daffodil Cultivars Corona split-usually for more than half its length
a) Collar Daffodils

Split-corona
daffodils with the corona segments opposite the
perianth segments; the corona segments usually in two whorls of three
b) Papillon Daffodils


## Split-corona

daffodils with the corona segments alternate to the perianth segments;
the corona segments usually in a single whorl of six

## Division 12

Other Daffodil Cultivars
Daffodil cultivars which do not fit the definition of any other division.


Division 13 Daffodils Distinguished Solely by Botanical Name All species and wild or reputedly wild variants and hybrids

## CULTURE FOR GROWING OUTDOORS

Bulbs should be purchased from a reputable dealer. A good bulb has a flower in it when it is sold for autumn planting. Give-away bulbs, unless from a trusted source, are of dubious value. Bargain bulbs from other than reputable dealers are not bargains. Never buy or plant a soft daffodil bulb, because a soft bulb usually means basal rot or other disease.

Daffodils will grow in light shade, but do better in full sun. Deep shade keeps them from blooming after the first year. They will grow well in most well-drained soils Daffodils prefer plenty of moisture when in growth and a drying out period in between. If the soil is excessively dry while daffodils are growing, apply water at the rate of one inch per week to maintain the foliage, flowers and vigor. During the soil preparation, a complete fertilizer, low in nitrogen such as $5-10-10$, should be worked in (about $1 / 4$ cup per square foot). Be sure the fertilizer does not come in direct contact with the bulbs.

Daffodils should be planted in the fall or when the soil begins to cool, or any time before the ground freezes. Most root growth is done in the fall and early winter. Bulbs of normal size should be planted about six inches deep. Smaller bulbs should be planted at lesser depths. A shallow planting will require more frequent lifting and division as the bulbs tend to split up more quickly.

Leaves should never be cut since they are essential in rebuilding the bulb after flowering. Cutting off or braiding sprawling green foliage severely limits the short time that the bulb has to make its growth and form a flower and should not be done. When the foliage yellows, remove it by pulling, and cultivate the ground to prevent insects from entering the bulb through the holes left by the dying foliage.

Daffodil bulbs divide and one bulb in time becomes a clump of bulbs. They should be dug and divided when the flowers become smaller and fewer (about every 4-5 years). Dig as the foliage turns yellow, store preferably in mesh bags until fall in a cool, airy place Do not forcefully break side shoots off the bulbs

A mulch gives bulbs a longer, better growing season. It also keeps the flowers clean and helps to make the ground cooler in summer and provides protection in the winter. Mulch may be shredded bark, straw, pine needles or any clean suitable material available locally

One of the many virtues of daffodils is that they are comparatively free of pest and diseases, especially in the northern states. In areas where the summers are very hot and humid, certain procedures to combat attacks by fungus may be necessary. In the north, the daffodil fly is one of the possible threats. In a brief guide, such as this booklet, it is impractical and unnecessary as far as most gardeners are concerned, to describe the symptoms and treatment of health problems that occasionally affect daffodils. Trouble may usually be avoided by purchasing bulbs from reliable sources and destroying any bulbs not firm and sound. Then if the bulbs are planted in soil that has not previously grown daffodils, trouble is unlikely. If there is ever evidence of abnormal leaf growth, the bulb producing it should be dug up and destroyed unless the grower feels qualified to treat the problem. Further information may be obtained from the ADS office.

Newly purchased bulbs already have the flower bud developed when you receive them, and should produce a bloom the following spring. If you have received a bulb that is not frue-to-name if the catalog says it is white and your flower is yellow and red --you'll
know!) or the bulb fails to grow, a polite letter to the dealer will usually bring a replacement bulb or refund. But remember that some daffodils take several days to acquire the catalog color (i.e., whites that open pale yellow or pinks that open yelloworange, colors will be at their best in a cool, moist season). It is not uncommon for buibs to fail to flower, or give small blooms the second year in your garden. They are busy adapting to your soil, climate and care. By the third season they should repay you with a generous supply of lovely blooms

## FORCING BULBS FOR INDOOR BLOOM

It is possible to have a whole season of flowering daffodils indoors before spring. Tulips, hyacinths, dwarf daffodils and other bulbs such as snowdrops, scillas, muscari chionodoxa and crocus force equally well. All these bulbs are handled much the same way, although the forcing period may vary slightly. Some cultivars (early cultivars and those that do not grow too tall) are better suited for forcing than others. Catalogs usually identify forcing varieties.

Plastic pots have the advantage of not drying out as rapidly as clay pots. They are easier to clean and lighter in weight as well as less expensive. However, many prefer clay bulb pans or pots. Bulbs grow equally well in either. Six to eight inch pots are recommended for daffodils. The pots should be scrubbed clean before use, and clay pots soaked for several hours to fill pores. A good potting mixture consists of one part good garden soil, one part sand and one part peat moss. Fertilizer should not be added to the mixture. A suitable potting mixture may be bought from a florist if only a few bulbs are to be potted.

Planting can take place any time from mid-September to December, depending on the desired date of flowering, and the type of storage used. As a general rule, for late flowering, plant late and for early flowering, plant early. Remember, the minimum length of the total cold treatment should be 13 weeks; 15 weeks preferred. Place broken crockery over drainage holes and cover with a little sphagnum moss, pebbles, or other coarse material before adding potting soil. Half fill the pot with soil, place the bulbs, then fill the pot with soil. Settle the soil well around the bulbs by jarring the pot sharply and lightly pressing soil with fingers. Do not pack hard. Do not press the bulbs into the soil The soil under the bulbs should be loose so that good rooting can take place quickly Bulbs should be set with their tips well above the soil line that should be an inch below the rim of the pot. Label each pot with the name of the cultivar, date of planting and date to be placed in the house.

After planting, water the pots thoroughly and place them in a refrigerator at $35-45$ degrees F . The medium should be kept moist through the rooting and cooling period After five or six weeks, the roots should emerge out of the bottom of the containers. The shoots will subsequently emerge from the bulbs.

After a minimum of 13 weeks of cold, the first bulbs may be placed in the house. Longer cold storage will result in taller flowers, while storage time shorter than 13 weeks will result in smaller plants and sometimes aborted flowers.

In the house, place the plants in an area with a temperature of approximately $60^{\circ}$. For best results, place them in direct sunlight. The plants will require about $3-4$ weeks to flower. Once the flowers begin to open, take the plants out of direct sunlight. The flowers will last longer. Since the bulb contains most of the plant food it needs, it is not necessary to fertilize. Bulbs which have been forced indoors are usually of little value for outdoor planting. Daffodils, however, can be placed outdoors as soon as spring arrives. Many of them will flower in one to two years

If you do not have a spare refrigerator, or do not wish to put pots of bulbs in your refrigerator, there are several other methods you may use. Remember, root growth does not occur when the temperature is below freezing.

- Method 1. Plunge soaked pots into soil or peat moss in coldframe and keep damp. Never leave pots uncovered in areas of severe cold as they will freeze from the bottom and break.

Method 2. Dig trench in ground 12-15 inches deep. Level off bottom of trench. Place well-soaked pots in trench and cover to ground level with soil, compost, peat, or a combination of such material. A 2 -inch layer of sand on top of the pots will make removal easier, and a layer of leaves, straw, or other mulch over the top to a depth of several inches will keep the ground from freezing if pots have to be lifted in freezing weather. Mark location of trench with tall stake in case of snow. An alternate method is to place a crate or box filled with six inches of peat on the bottom of the trench Place pots of bulbs on peat and fill with dry, crisp leaves. (Pit should be dug to below freezing level.)

- Method 3. Use shallow window well which is accessible from the basement. Place storn sash or other protection outside over window well when frost arrives. Water every 2 or 3 weeks. In especially cold weather, leave cellar window ajar to prevent freezing of pots and to permit continuation of root growth.
- Method 4. Store in a cool spot in cellar, garage, porch, or greenhouse. Water as needed. Dampened pots wrapped in polyethylene should need no watering. When sprouts are about 4 inches high and flower buds well out of neck of bulbs, bring into wanner place. Increase heat gradually from $50^{\circ}$ to a maximum of $60^{\circ} \mathrm{F}$. Reduce water ing just before buds open, and when flowers are in full bloom, apply very little water.

Catch a January thaw to bring pots inside under Methods 1-3. Bring into a cool room and treat as above.

Some good Forcing Varieties: 'Kingscourt' 1 Y-Y, 'Unsurpassable' 1 Y-Y, 'Mt. Hood' 1 W-W, 'Carlton’ 2 Y-Y, ‘Galway’ 2 Y-Y, ‘Fortune’ 2 Y-O, ‘Ice Follies’ 2 W-W, 'Binkie' 2 Y-W, 'Barrett Browning' 3 W-O, 'Thalia' 5 W-W, 'February Gold' 6 Y-Y, 'Peeping Tom' 6 Y-Y, 'Jack Snipe’ 6 W-Y, 'W.P. Milner' 1 W-W, 'Tête-a-Tête’ 12 Y-Y.

## FOR DAFFODIL EXHIBITORS

The successful exhibitor does as much homework as possible with his blooms before proceeding to the show. He should have obtained a schedule and entry tags and he should have studied the schedule for probable entries. Winning at an ADS show involves successful completion of the following steps:

1. Selection of blooms

Cutting the blooms, labeling and conditioning
Grooming and storing
Transportation to exhibition hall
Staging exhibits and entering show

In choosing blooms for exhibition, remember the points of excellence for which judges look:

1. Condition 20 points Absolute freshness, absence of nicks or tears, clean
2. Form 20 points A specimen typical of its classification, cup in proportion to perianth and rounded. Perianth with certain exceptions should be broad and flat with overlapping segments symmetrically arranged.
3. Substance and Texture 15 points Thick tissue is considered good substance, while smooth and crisp blooms have the desired texture.
4. Color 15 points Bright and clear, without fading or streaking
5. Stem 10 points Straight and in proportion to the bloom.
6. Pose 10 points Typical for the division with neck neither too long nor too short.
7. Size 10 points Typical for the cultivar/species when grown outdoors under favorable conditions. It does not mean bigness is desired, but if all other qualities are equal, the larger bloom is preferred. A slightly smaller bloom in perfect condition is preferable to a larger one with faults.

Cut when the bloom is at the peak of perfection, if possible. Orange and red cups should be picked as soon as possible after opening. The color fades or burns with extended sun exposure. Pink cultivars reach their peak of color development after they have been open two or more days. White cultivars may have a yellowish cup on opening. They should not be cut until they have turned pure white throughout. If weather is cloudy and cool, let blooms grow to reach peak perfection.

It is advisable to label each specimen as it is cut. Write the name and classification directly on the stem with a ball point pen. To be show-worthy, flowers should be groomed and hardened off or conditioned. Remove dirt, fallen pollen with a soft brush or a Q-tip slightly moistened with water. Do not remove sheath or injure it; manipulating it for better effect is permissible. You can also improve the pose of specimens. Blooms will turn toward the light, so that poor pose of individual blooms will change by placing them above or below a light
source, as the case may be. The best pose is at a right angle to the stem except for those cultivars, such as triandrus hybrids; where such a pose in not characteristic Ifdmature cultivars may be hurried along by cutting when color shows and placing in two inches of warm water in a warm room. After grooming, place blooms in warm water for $1 / 2$ hour or more, then transfer to two inches of cool water. Store overnight in a cool, dark place free of drafts. Do not crowd flowers in containers.

Sometimes, blooms are at their peak well before show time. It is possible to hold such early' blooms for up to two weeks in the refrigerator (non frost-free is preferred). The usual temperature of about 36 degrees $F$ is satisfactory. Do not allow the blooms to freeze. There are two methods and each has its advocates.

Method 1. Cut blooms in their prime, clean, and place them dry in a closed plastic bag and lay the bag on the refrigerator shelf. The blooms may wilt a bit. The evening before the show, take the flowers from the refrigerator, re-cut the end of the stem and place the blooms in water to harden as described above Method 2. Place damp towel on the bottom of the refrigerator. Place daffodils in containers of water on the towel. Mist blooms twice a day with fine spray.

Several methods of transportation to the show are possible, but above all do not crowd flowers or expose them to the wind. Keep stems straight; they can be wedged in bottles with cotton. Containers may be:

- Soft drink bottles, smaller ones for individual blooms, the larger with wide mouth for three of a kind
- Florist boxes with blooms resting on florist paper, tissue paper or disposable diaper cushions
- Large cartons with cardboard separations to fit the bottle containers Small containers for miniatures
- Test tubes set in holes drilled into block of Styrofoam

Go early to the exhibition hall. Cooperate with the show committee by registering early. Have a prepared list of entries and make out entry cards correctly. Familiarize yourself with the location of the classes. Blooms are staged in containers provided by the show, using wedging material also provided. Use the wedging material to hold the bloom straight and to its best advantage. Vases of three should contain three blooms as alike as possible and may be staged in a triangle or other pleasing arrangement. Use the wedging material to maintain the arrangement in the manner you wish. Attach the entry card, check all requirements for the class and place the vase in the correct class. Leave the exhibition hall promptly when the committee announces that the time for entries has closed

## DAFFODIL SPECIALISTS IN THE UNITED STATES

Cascade Daffodils, P O Box 237, Silverton, OR 97381
Cherry Creek Daffodils, 21700 SW Chapman Road, Sherwood, OR 97140-8608
Columbia Gorge Daffodil \& Tree Farm, P O Box 205, Corbett, OR 97019
Grant E. Mitsch Novelty Daffodils, P O Box 218, Hubbard, OR 97032
Oakwood Daffodils, 2330 W. Bertrand Road, Niles, MI 49120
Old House Gardens, 536 Third Street, Ann Arbor, MI 48103 (heirloom daffodils) William R.P. Welch, 43 E. Garzas Road, Carmel Valley, CA 93924-9450 (tazattes) Nancy Wilson, 6525 Briceland-Thorn Road, Garberville, CA 95542 (miniatures)

## DAFFODIL SPECIALISTS OVERSEAS

Craig Broadfield, 23 King Edward St., P O Box 18, Ulverstone, Tasmania 7315 Australia Brogden Bulbs, 41 Grey Street, Normanby 4852, Taranaki, New Zealand Noel Burr Daffodils, Rushers Cottage, Rusher Cross, Mayfield, East Sussex TN20 6PX England
Copford's Bulbs, Dorsets, Birch Road, Copford, Colchester CO6 1DR, England Glenbrook Bulb Farm, 28 Russell Road, Claremont, Tasmania 7011, Australia J. N. Hancock \& Co., Jacksons Hill Road, Menzies Creek, Victoria 3159, Australia Hofflands Daffodils, Little Totham, Maldon, Essex CM9 8LT, England Steve Holden Daffodils, Copse Lane Walberton, Arundel, W Sussex BN18 0QH England John A. Hunter, Patons Road, RD 1 Richmond, Nelson, New Zealand
Jackson's Daffodils, P O Box 77, Geeveston, Tasmania 7116, Australia
Koanga Daffodils, P O Box 4129, Hamilton East, New Zealand
G \& F. Miller Daffodils, 321 Mangamahae Road, RD 3, Otorahonga, New Zealand
Monocot Nursery, Jacklands, Jacklands Bridge, Tickenham, Clevedon, Avon BS21 6SG
England (species bulbs and seeds)
Ringhaddy Daffodils, Ringhaddy Road, Killinchy, CO Down BT23 6TU, Northenı Ireland
Ron Scamp, 18 Bosmeor Close, Falmouth, Cornwall TR11 4PX, Northern Ireland
Templeton Daffodils, Pound Road R D 6, Christchurch, New Zealand
Tyrone Daffodils, 90 Ballynahatty Road, Omagh, CO Tyrone BT78 1TD Northen Ireland

## general bulb Catalog dealers in The united states

## Tacques Amand P O Box 59001, Potomac, MD 20859

Brent \& Becky's Bulbs, 7463 Heath Trail, Gloucester, VA 23061
P. deJager \& Sons, 188 Asbury Street, South Hamilton, MA 01982

Dutch Gardens, P O Box 200, Adelphia, NJ 07710
Charles Mueller \& Bundle of Bulbs, 7091 N. River Road, New Hope, PA 18938
McClure \& Zimmerman, P O Box 368, Friesland, WI 53935-0368
Mary Mattison van Schaik Imported Dutch Bulbs, P O Box 32, Cavendish, VT 05142
Joln Scheepers Inc., P O Box 638, Bantam, CT 06750-0638
Van Engleen Inc., P O Box 638, Bantan, CT 06750-0638
The Daffodil Mart, 30 Irene Street, Torrington, CT 06790-6668

## GOOD DAFFODILS AVAILABLE FROM CATALOG SPECIALISTS

## Division 1, Trumpet

Y-Y Arctic Gold, Akala, Goldfinger, Golden Rapture, Kingscourt, Tenterfield
W-Y Bravoure, Downpatrick, Pop's Legacy, Preamble
W-P At Dawning, Rima, Pink Silk
W-W Cantatrice, Panache, Queenscourt, Quiet Waters, Rashee, Silent Valley
Y-W Chiloquin, Honeybird, Lunar Sea
Division 2, Long cup
Y-Y Golden Aura, Maya Dynasty, Michael's Gold, Miss Primm, Symphonette, Tristram
Y-O or R Casterbridge, Fly Half, Lennymore, Loch Hope, Resplendent, Banker
W-Y Festivity, Geometrics, Holmes Fen, Oops, Parterre, Punter, Westholme
W-O or R Avenger, Conestoga, Hotspur, Rameses, Royal Marine, Young Blood
W-P Berceuse, Fragrant Rose, Fair Prospect, Fine Romance, High Society, Rainbow
W-W Ashmore, Broomhill, Glenside, Gull, Misty Glen, River Queen
Y-W or Y-P Avalon, Altun Ha, Coldbrook, Daydream, Kelanne, Carib Gipsy Division 3, Small cup
Y-colored perianth Alturist, Bradbury Rings, New Penny, Nonchalant, Triple Crown W-Y Evesham, Cedar Hills, Loth Lorian, Rimmon, Spindletop, Vernal Prince
W-O or W-R Corofin, Irvington, Kimmeridge, Merlin, Palymra, Rockall
W-W Achnasheen, Angel, Silver Wood, Silver Crystal, Verona, Yum Yum

## Division 4, Double

1 bloom to stem: Crackington, Gay Kybo, Manly, Spun Honey, Tahiti, Unique
More than one bloom to stem: Cheerfulness, Erlicheer, Yellow Cheerfulness
Division 5, Triandrus Hybrids
Arish Mell, Ice Wings, Saberwing, Sunday Chimes, Lapwing,
Division 6, Cyclamineus Hybrids
Charity May, Beryl, Elizabeth Ann, Rapture, Trena, Warbler
Division 7, Jonquil Hybrids
Dainty Miss, Eland, Indian Maid, Intrique, Pipit, Sweetness, Stratosphere
Division 8, Tazetta Hybrids
Avalanche, Falconet. Hoopoe, Matador, Motmot
Division 9, Poeticus Hybrids
Cantabile, Chesterton, Killearnan, Poet's Way, Starlet, Vienna Woods,
Division 11, Split-Coronas
Cool Evening, Max, Menehay, Pink Glacier, Pink Holly, Tripartite
Division 12, Miscellaneous
Dovekie, Bittern

## Miniatures:

Baby Moon, Clare, Hawera, Fairy Chimes, Jumblie, Little Beauty, Little Gem, Minnow, Mite, Quince, Segovia, Sundial, Sun Disc, Stafford, Tete-a-Tete, Yellow Xit

## Intermediates:

Bantam, Birthday Girl, Brooke Ager, Lemon Tree, Pink China, Scarlet Tanager, Sidley

## GOOD CULTIVARS OFTEN AVARLABLE LOCALLY

Division 1, Trumpet
'Unsurpassable', 'Mt Hood', 'Beersheeba', 'Pay Day'
Division 2, Long cup
Carlton', 'Ice Follies', 'Salome', 'Binkie', 'Armada', 'Avalon', 'Camelot' Division 3, Small cup
'Birma', 'Barrett Browning', 'Dreamlight
Division 4, Double
'Cheerfulness', 'Sir Winston Churchill', 'Erlicheer', 'Tahiti', 'Bridal Crown'
Division 5, Triandrus Hybrids
'Tresamble', 'Ice Wings', 'Thalia', 'Lemon Drops'
Division 6, Cyclamineus Hybrids
'Peeping Tom', 'February Gold', 'Tracey'
Division 7, Jonquil Hybrids
'Suzy', 'Trevithian', 'Sweetness', 'Pipit', 'Intrique', 'Stratosphere'
Division 8, Tazetta Hybrids
'Geranium', 'Scarlet Gem', 'Avalanche
Division 9, Poeticus Hybrids
'Actaea'
Miniatures - 'Tete-a-Tete', 'Minnow', 'Hawera'


DAFFODIL ANATOMY
The perianth consists of the outer whorl of three sepals and the inner whorl of three petals. The corona is often referred to as the trumpet or cup, depending upon its size.

