

American Camellia Society
The Camellia Journal



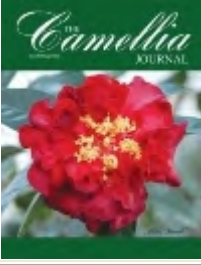
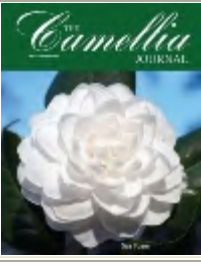
BRADFORD KING ARTICLES

2007 - 2010



C. reticulata 'Jim Smelley'

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Spotlight: *Camellia reticulata*-hybrid ‘Valentine Day’

The *Camellia reticulata* and *reticulata* hybrids are loved for their huge flowers with ruffled petals that make them look like a peony-formed flower, although they usually are semi-double if the petals are counted. The foliage is usually leathery and deeply veined which gives *reticulata* its name. They typically bloom from mid to late season. *C. reticulata* and *reticulata*-hybrids are now grown throughout the camellia world. They are second to *Camellia japonica* in popularity with gardeners in America.

Once *C. reticulatas* came to the United States from Yunnan China in 1948, gardeners began to breed them. Typically *Camellia reticulata* is the seed parent and *C. japonica* is the pollen parent. One of the early hybridizers was Howard Asper. He was Curator of Descanso Gardens and later became Superintendent at Huntington Botanical Gardens, both noted for their *Camellia* collections and as early recipients of the Yunnan *reticulatas*. Asper was a prolific breeder who introduced the following *C. reticulata*

cultivars: ‘Mouchang’, ‘Pharaoh’, ‘Red Emperor’, ‘William Hertrich’; the following *C. sasanqua* x *C. reticulata* hybrids: ‘Dream Girl’, ‘Flower Girl’, ‘Show Girl’; the *C. saluenensis* x *C. reticulata* hybrid: ‘Valley Knudsen’; and the following *C. reticulata* x *C. japonica* hybrids: ‘Aztec’, ‘Cherry Ripe’, ‘Forty-Niner’, ‘Four Winds’, ‘Fire Chief’, ‘Howard Asper’, ‘Milo Rowell’ and ‘Valentine Day’.

Many people consider ‘Valentine Day’ to be the very best of his introductions. It is a cross between *C. reticulata* ‘Crimson Robe’ (‘Dataohong’) and *C. japonica* ‘Tiffany’. It is a large to very large salmon pink bloom with a formal double form and rose bud center. It is one of only a few formal double *reticulata* flowers. ‘Valentine Day’ is a spectacular bloom. Its variegated form is a striking pink, blotched white formal double flower. Let the spotlight illuminate ‘Valentine Day’. – **Bradford King**



Figure 1: ‘Grand Prix’ a favorite in the garden for its beauty and color.

In the RED...

Story and Photos by Bradford King

Red is a strong hot color that symbolizes conflicting emotions from passionate love to violence and warfare. It is chosen frequently by extroverts and is the top pick for males. It is a symbol of power. In China, red is the color of happiness and prosperity, and is used to attract good luck. Many camellia growers are drawn to red flowers, for example, Bill Woodruff, an early California camellia guru, was frequently heard saying a camellia needs to be big and red to be a show winner. Hulyn Smith, a past American Camellia president and well know camellia hybridizer from Georgia, has been breeding large red camellias for years. Are people, like hummingbirds, attracted by the red color? Bulls are enticed by the red flag waved by the matador. An actress in a beautiful red dress catches our eye. Teachers mark students papers with a red pencil, and businesses certainly don't want to be in the red. Is there something in human genetics that attracts us to red hues? Who knows? What we do know is that red camellias look smashing in the garden and they frequently win at camellia shows.

VERY LARGE

We begin with the largest red camellias for their striking presence in the landscape and show winning qualities. ‘Paul Haskee’

is a japonica with an anemone to peony form that picked up 30 points at camellia shows in 2008- 2009. Introduced by Mandarich in 1955, it grows vigorously upright and densely making it a very strong landscape camellia. ‘Grand Prix’ is a brilliant red semi-double that does well in the garden due to its vigorous upright growth. It does well in trays of like blooms and when injected with gib is a show stopper. (Figure 1). In 1948 twenty *reticulata* from Yunnan China came to America, and in the mix was ‘Dataohong’, which we know as ‘Crimson Robe’, found in many older gardens where it is appreciated for its semi-double flower with wavy crinkled petals. ‘Dataohong’ is also the parent of a number of wonderful *reticulata* hybrids like the very large ‘Dr. Clifford Parks’ and ‘Harold L. Page’, two of the most beautiful red camellias available. (Figure 2: ‘Harold L. Page’)

In 1989 the popular and biggest show winner of the last ten years, *reticulata* hybrid ‘Frank Houser’ was introduced. It won the most points in camellia shows through out the United States again in 2008- 2009 with 203, which is twice as many points as any other cultivar except ‘Frank Houser Variegated’ with 124 and the miniature white ‘Man Size’ with 130. In the 2009- 2010 camellia show flower season ‘Frank Houser’ was the number one ranked *reticulata* in the Gulf region and the variegated form



Figure 7. ‘Yuletide’ is a sun camellia that makes a wonderful garden plant and wins at shows. The flower is a brilliant red with a tight center of golden stamens that usually blooms in the holiday season and early winter.

was number two.

In the Atlantic and Pacific regions the variegated form was number one and the natural number two. There is no other camellia flower with this kind of popularity throughout the United States. ‘Frank Houser’ has a very large semi-double to peony form rose red color flower and grows on a vigorous spreading open upright plant. The hybridizer, Walter Homeyer, was evaluating this seedling when his neighbor Dr. Frank Houser and he were talking together over the fence. While Homeyer didn’t think too highly of the flower his neighbor was impressed, telling him, “What a beautiful flower”. “Well then, I’ll name it after you. What do you want Dr. Frank Houser or what?” Homeyer asked. They settled on ‘Frank Houser’.

LARGE TO VERY LARGE

Widely grown japonicas in this size are ‘Guilio Nuccio’ and

‘Kramer’s Supreme’, both of them introduced in the mid ’50’s in California. Of the many California nurseries from this time, including Kramer Brothers, only the Nuccio’s Nurseries has survived. The Nuccio family celebrated their 75th anniversary in 2010. This parallels American history with the loss of small businesses like family farms, dairies, and small mom and pop grocery stores due to housing developments, increased land values, and the fact that children were not interested in the long hours and economic uncertainty of these small enterprises. However, camellia lovers continue to cherish the older cultivars like ‘Mathotiana’ as they add newer ones to their collections. From the 1960’s we have ‘Grand Slam’, a brilliant, dark toned, semi-double to peony flower japonica. (Figure 3) In the 1970’s there was *japonica* ‘Bob Hope’ which blooms mid to late season and *reticulata* ‘Miss Tulare’, a beautiful. full peony to rose form to formal double. ‘Happy Higo’ is an American Higo introduced in the ’90’s which

makes a good landscape plant as it grows vigorously.

LARGE

Jude Nuccio proclaimed that the best red large japonica is 'Mark Alan'. He told me, "You know, just because it's new doesn't mean it's better". Point taken, yet there also are some great new cultivars. 'Royal Velvet' earned 93 points in the 2008- 2009 show season making it the number one large camellia. It is a stunning, very dark red semi-double that blooms mid season in a vigorous, compact, upright manner. It was named by Jim Nuccio. The story I heard is they were having a difficult time coming up with a name for this plant, and Jim happened to see a tag on a bathroom floor mat which said "Royal Velvet". This is a great name for a great japonica. One of the best new landscape japonicas is the 2001 introduction 'Nuccio's Bella Rosa'. This beautiful formal double has a long blooming season and a heavy bud set even when young. It is average upright stocky in growth habit.

MEDIUM TO LARGE

The anemone to peony form dark red flower of 'Grand Marshal' leads the parade. While its variegated form is a more frequent winner at shows, the red flower is a great plant in the landscape as well as the show table. There are several other dark red japonicas that make striking additions to a camellia collection. 'Candy Apple' has a semi-double to loose peony flower that grows well in the garden on a bushy upright plant from mid to late season. 'Cherries Jubilee' is a burgundy red with a mix of red and white petaloids that intermingle with yellow stamens in a semi-double to loose peony form, which is an eye catcher.

MEDIUM

The medium red flower with the most show points in 2008-2009 was 'Black Magic' with 65. In the 2009-2010 camellia show season it had the most wins among red camellias. The very dark, glossy red, irregular semi-double to rose form flower grows in a loose upright manner and has unusual and interesting holly like foliage. (Figure 4) If you like complicated flowers with anemone and full peony shaped flowers, 'Rudolph' is a good choice. It is named after Rudolph the Red Nose Reindeer. The beautiful rose form to formal double flower of 'Glen 40' has been a favorite since its introduction in 1942. It was introduced by



Figure 2: 'Harold L. Page' has its roots in Yunnan China

the camellia. (Figure 6) In addition 'Wildfire' wins regularly at camellia shows in like trays of three or five.

SMALL TO MEDIUM

In the small camellia classes in Southern California the most consistent winner as a single, trays of three and five like blooms is the small to medium 'Red Hots'. Nationally in 2008-2009 camellia shows 'Red Hots' earned 52 points. It has a brilliant red, tubular semi-double flower with pointed petals. It grows upright in a columnar fashion and has lovely dark green foliage. I pick its leaves for extra foliage to bring to camellia shows. In my garden it has the best foliage of all in my collection, but the plant's flowers are almost always small, not reaching beyond 2 1/2 inches and are not show quality. This reminds me that whenever possible it is best to purchase a camellia in bloom to see the quality of the particular plant as we are looking for the one that really stands out from its peers. 'Red Hots' is also a great landscape

Azalea Glen Nursery in Loxley, Alabama. They discovered it in bed 40, hence the name 'Glen 40'. When you are in the market for a formal double red camellia that blooms late in the season, 'Spring Fling' is a great choice.

My personal favorite medium red camellia is 'Wildfire'. Since it is planted in front of our eat-in kitchen window, I enjoy the mass of flowers from December through most of March as I read the paper, sip morning coffee, write camellia articles, answer e-mails and watch the hummingbirds drink from the window feeder and rest in the branches of

camellia and can be used in small places due to its slender columnar growth habit.

One of the old favorites is 'Professor Charles S. Sargent', introduced by Magnolia Gardens in 1925. The dark red full peony flower is borne on a vigorous compact upright plant that is great in landscapes and its flowers are seen today at camellia shows. This cultivar was named for the renowned American botanist Charles Sprague Sargent (1891-1927). He was the first director of the Arnold Arboretum at Harvard University, a position he held until his death. He was influential in the conservation of American forests especially the Catskill and Adirondacks. This antique cultivar is a good



Figure 3: 'Grand Slam' an older cultivar from the 1960's.



LEFT: Figure 5: ‘Maroon and Gold’ named for the colors of the University of Southern California.

BELOW: Figure 4: ‘Black Magic’ had the most wins among red camellias in the 2009-2010 camellia show season.



reason for camellia shows to have a special class for “Old Timers”. In Southern California we have been doing this for several years, setting 1950 and earlier as the criteria, regardless of size or species. It is a very competitive and popular class as it provides additional growers and camellias a chance to win. The American Camellia Society and the Great Gardens of America Preservation Alliance are committed to locating, identifying and preserving older camellias for future generations to enjoy.

SMALL

There are some beautiful and interesting small camellias that make an impact in the garden and win at camellia shows. The rich burgundy wine color of ‘Cabernet’ with its perfectly formed formal double comes to mind as a cultivar that blooms late season, making it a candidate for extending the flowering season of a camellia collection. The dark maroon of the loose peony flower with golden stamens of ‘Maroon and Gold’ also is a great choice. It blooms mid to late season and takes gib well, thereby providing winning flowers for early shows. The Nuccios named it for the colors of the University of Southern California, but copyright laws don’t allow for “cardinal and gold”. This helps explain why no camellia is called the “Fighting Irish”. Sorry, you leprechaun lovers, but the weather in South Bend is much too cold for camellias. (Figure 5 ‘Maroon and Gold’) The rich cardinal color of ‘Cardinal’s Cap’ with its five petals surrounding a dense mass of over 100 red petaloids forms an interesting and attractive anemone formed flower. It grows on an upright dense plant with nice foliage.

MINIATURE TO SMALL

‘Bob’s Tinsie’ has a brilliant red anemone form flower with unusual white inner petaloids and bright yellow stamens. It has small foliage that offsets the small flower on a compact, upright

growing plant. The plant looks good in the foreground of the landscape and is an excellent candidate for a container.

MINIATURE

We mustn’t overlook the miniature camellias because good things do come in small packages. Three miniature red cultivars gleaned show points in 2008-2009. First was ‘Little Slam’ with 36, then ‘Little Red Riding Hood’ with 32, and ‘Fir Cone’ with 26. ‘Little Slam’ has a full, peony rich red flower that blooms early to mid season and grows on a narrow upright plant. ‘Little Red Riding Hood’ is more crimson, and sometimes a formal double, and at other times, peony in form. It is a vigorous, compact, upright plant. ‘Fir Cone’ is a blood red semi-double with stacked petals that look like a miniature pine cone, hence its name. Like many of the red cultivars its variegated form is preferred by many. However, both are capable of winning in a camellia show. The interesting and beautiful dark shiny ‘Lipstick’ anemone flower is distinguished by its white petaloids bordered with red. It grows slowly in a dense upright manner.

NONRETICULATA HYBRIDS

The vast majority of nonreticulata hybrids are very free flowering shades of pinks with a few whites and bi-colors but not very many red cultivars. The best red small to medium flower is ‘Freedom Bell.’ Its bloom is a bright, clear bell-shaped semi-double that looks good in the garden, where it grows fast and upright and wins its share at the shows. In 2008 -2009 it won 56 points. The large rose red full peony flower with ten rows of petals and a jumble of petaloids describes ‘Anticipation’, a blossom bred by Les Jury from New Zealand. Os Blumhardt from New Zealand used *japonica* ‘Kuro Tsubaki’, the black camellia, to breed several of the darkest red camellias. The most popular is ‘Night Rider’. It is a semi-double flower and a shy bloomer

when young. It needs some heat to bloom freely in mid to late season. The new leaves are a very attractive dark maroon color, turning dark green as they mature.

SUN CAMELLIAS

These cultivars thrive in full sun and are the first camellias to bloom. The small leaves and profuse blooms make them excellent landscape plants. *Sasanqua* are generally considered a true camellia species. In nature the flowers are single, small, and usually white. After many years of cultivation and interbreeding new colors have been introduced and a few of them are red. Two of the very best are 'Bonanza' and 'Yuletide'. They are wonderful garden plants that win at shows in the "Species" class. In 2008-2009 'Bonanza' won ten points and 'Yuletide' fifteen. 'Bonanza' has a medium semi-peony deep red bloom. 'Yuletide' is a brilliant red with a tight center of golden stamens that usually blooms in the holiday season and early winter, which is late for this species. (Figure 7) Nuccio's Nurseries introduced both as *sasanqua* cultivars which are where they are placed in the Camellia Nomenclature but others have listed them as *hiemalis* and *vernalis* respectively. This reflects the controversy among taxonomists. *C. vernalis* is most likely a hybrid between *C. sasanqua* and *C. japonica* that arose hundreds of years ago. *C. hiemalis* is generally not thought to be a separate species but a nonreticulata hybrid with *japonica* and *sasanqua* parentage dating back many years. Two red *hiemalis* are outstanding landscape camellias. 'Dazzler' is a rose red semi-double flower and 'Shishigashira' is a small bright rose red semi-double to rose form double.

CONCLUSION

Red camellias have a major place in the hearts, minds, and gardens of camellia lovers. Many are attracted to the very large and large red camellias for the powerful impact they make in the garden and on the show table. The range of red camellias makes us happy and optimistic as we watch the buds open into beautiful flowers. The interesting forms of 'Bob's Tinsie', 'Cardinals Cap' and 'Lipstick' add to the fun of growing unique camellias. The dark red of 'Black Magic', 'Kuro Tsubaki' and 'Night Rider' remind us of the genetic diversity of camellias.

*May your red camellias
bring you prosperity ...
and good luck.*

Figure 6: 'Wildfire' a mass of blooms from December through most of March.





Figure 1: ‘Bert Jones’ is a scented sasanqua with large, silvery pink semi-double flowers that arrive late in the season.

Story and Photos by Bradford King

The first thing people do when they see a beautiful flower is bend over and smell it.

This is an instinctive reaction to take in the beauty through the eyes and nose. It most likely dates back to early mankind foraging for food, using sight, smell, touch, and, finally, taste, to determine if it is edible. There are large differences among people's sense of smell, with some lacking the ability, and others employed in the perfume industry who can differentiate between subtle scents. In general women have a wider appreciation of smell than men. In addition, the perception of a pleasing fragrance is highly subjective, and undoubtedly this is why there are hundreds of perfumes, air fresheners, and scented bath products for sale. One person is attracted to sweet and musky while another would say, "That stinks".

Some camellia species are naturally scented. Many *C. sasanqua* cultivars have a smell that some people find unpleasant while others enjoy the sweet and musky fragrance. 'Bert Jones' is a good example of a scented sasanqua; it has a large, silvery pink semi-double flower that arrives late season. (Figure 1) *C. japonica* is the most popular and widely grown species but most cultivars lack scent, and when a scent is present it is pleasing, but very thin.

The first hybridizing programs for fragrance started in the United States in the 1960's. These early breeding programs focused on combining the best of the fragrant *C. japonica* cultivars. These crosses were generally disappointing. Fortunately *C. lutchuensis*, a naturally perfumed camellia, was brought to America from Okinawa, Japan, in the early 1960's. A profusion of small, single white flowers, borne on graceful sweeping branches, produces a fragrant aura in the garden. It is in the parentage of the best of the modern fragrant camellia hybrids. The first of these interspecific crosses using *C. lutchuensis* as pollen parent were female sterile and produced very little viable pollen.

However, through patient and diligent efforts, hybridizing breakthroughs began to be reported. Dr. William Ackerman in Maryland developed 'Fragrant Pink' by crossing *C. rusticana* 'Yoshida' with *C.*



Figure 2: ‘Scented Gem’ is a cute miniature fuchsia pink that grows upright, has lacy, light green foliage, and a sweet fragrance.

Sniff it.

*It's a camellia,
but it smells like
cinnamon ...
or lemon ...
...or spice.*





Melody Yang holds 'Ki-no-senritsu', which means 'Golden Melody' when translated into English.

No space too small... for a lovely camellia garden

Story and Photos by Bradford King

As more and more people are living in smaller homes and town houses there are many reasons to continue to plant camellias. In addition many homeowners have overlooked some part of their property that needs to be revitalized, for example a narrow side yard or the area next to the drive way. Let's look at some ideas for using camellias creatively in a small home garden.

THEME GARDENS

A small area is greatly enhanced when based on a theme. How about a Zen Garden? A meditation Zen Garden is simple, peaceful and easy to construct; you need a pea gravel bed with a few well



Figure 3: A closeup of the flower the young girl is holding -- 'Ki-no-senritsu'



Figure 1: A small Zen Garden

chosen rocks to serve as islands, with bamboo stakes as a border to contain all the pea gravel. Many people find it soothing to rake designs, using half-inch stones. Locate a bamboo bench near by for meditation, prayer or reading to make a private place to retreat and recharge. (Figure 1: A small Zen Garden) A curving path from the doorway through the garden planted with dwarf camellias maintains the theme. Two good choices are dwarf 'Shishigashira', with rose red flowers, in a sunny location, or in shade the lovely 'Coral Delight Variegated' with its semi-double deep coral pink and mottled white flowers. A specimen camellia that grows upright can be placed at the end of the path. If the garden is sunny there are many Sasanquas to choose from. One that grows upright and is vigorous is 'Kanjiro'. The brilliant rose red flowers, which shade darker at the edges, provide a mass of color when in bloom, and the small glossy green leaves are attractive throughout the year. (Figure 2 - 'Kanjiro' and Zen garden) In partial sun 'Debutante' will take more sun than most other Japonicas, and this readily available cultivar with its pink full-peony flowers would be a classic choice. If there is more shade than sun, choose your favorite Japonicas and plant them in groups of three or five for a pleasing look.

By careful planning the garden can have flowers fall, winter, and summer. Begin the season with 'Kanjiro' which blooms early, this would be followed by 'Debutante', and then midseason and late blooming cultivars, giving you months of winter flowers. For example, for a succession of red flowers begin with 'Wild-fire', followed by 'Grand Prix', and end the season with 'Glen 40' ('Coquettii'). This can be done with other colors or by mixing pleasing tones of your favorite camellias. In my mind's eye the cool peaceful pink tones of nonreticulata hybrids fit a Zen Garden. The early to mid-season flowers of 'Buttons/n Bows', followed midseason by 'Donation' and 'E. G. Waterhouse', then late blooming 'Island Sunset' and 'Nicky Crisp', complete the vision. While the traditional Japanese Zen garden is simple with few flowering plants -- keeping it open and peaceful -- this attitude can be maintained



Figure 2: A Zen Garden of sasanqua camellias.

with a few groups of camellias as discussed here. If a specimen tree is needed, Ginkgo biloba fits well in a sunny Zen Garden. The fan shaped leaves turn yellow in the fall providing color on the tree, and when they fall you have a beautiful carpet of gold. A single tree can provide shade for the camellias, or in a cluster serve as background for the Zen Garden.

A fragrant camellia theme would also make a delightful small garden. The Huntington Botanical Garden used clusters of three fragrant camellias three times at the Entrance way to the Chinese Pavilion. They used two clusters of 'Koto-no-Kaori' and one of 'Spring Mist'. Descanso Gardens planted three groups of five fragrant camellias in a half circle with a background of 20-to-30-foot mature camellias. They used 'Minato-no-Akebono', 'Spring Mist', and 'Koto No Kaori.' Both gardens used space between the groups to add impact. In a small garden these principles should be used or a single specimen artfully placed among trees, rocks and other plants may be a better use of limited space. The goal is to avoid a rigid straight line. Clustering blooming fragrant camellias will make this theme garden pop.

A collection of yellow toned camellias also would make a good garden theme. Three japonica choices are 'Dahloh-nega', 'Brushfield's Yellow', and 'Witman Yellow'. Non-reticulata hybrid choices include 'Buttermint', 'Golden Glow', 'Honeymoon', 'Lemon Twist', and 'Moonrise'. All of these cultivars are creamy white with yellow tones but not true yellows. A pure yellow is Camellia



Figure 6: A row of 'Yule Tide', a good break between neighbors.



Figure 5: 'Sweet Emily Kate' swings in a hanging basket in a pergola.

nitidissima, which has a small single to semi-double golden yellow, waxy textured, cup-shaped petals. There are also a dozen new yellow cultivars with pale to light yellow flowers that are available through nurseries specializing in camellias. The best of these are 'Ki-no-senritsu', a small to medium, soft yellow peony to loose peony bloomer that grows upright, open and moderately fast and (Figure 3) 'Senritsu-ko', a small to medium, formal to rose form light yellow flower with peach pink on the petal edges. It is beautiful and grows upright and moderately fast. (Figure 5) These two cultivars bloom in mid season.

A GARDEN SYMPHONY

The sound of water trickling and bubbling is like soft music -- pleasant and calming. A fountain in a small patio next to a window allows for its melodies to be heard when the window is open on a beautiful spring day. When in shade between two homes or under a pergola *Camellia japonica* cultivars will do well blooming in the cool months of fall and winter. When color is desired during the spring and summer the lively pastels of impatiens hybrids thrive in shade as do hosta with the lively bold foliage of the new hybrids. Ferns may be included for texture. *Clivia minata* typically have orange toned blooms with heavy dark green foliage that looks good all year. New hybrids are being developed that are yellow and orange red in tone.

By adding fragrant camellias the gardener can create a symphony for the senses. One specimen fragrant camellia, 'High Fragrance' with its medium peony flower of pale ivory and deeper pink petal edges would work. 'Spring Mist' is a vigorous grower with many lovely small semi-double blush pink flowers that shade to white. The cluster blooming fragrant camellia 'Koto-nokaori' with small rose pink flowers and lacy upright growth could be used as a single specimen or in a group of three for impact. Three lacy leaved 'Scented Gem', with its miniature pink anemone blooms, add color, fragrance and texture, and it grows slowly and is therefore a good fit for a small garden. Patience may be required as it is a shy bloomer when small. 'Minato-no-akebono' has a single light pink toned deep pink miniature flower that blooms on a loosely upright plant with a slightly loose growth habit. Under a pergola a hanging basket of 'Sweet Emily Kate' with its slow pendulous growth and sweet, light scented, blush pink to pale pink center loose peony flowers add to the beauty of a small garden. The lovely small flow-



Figure 7: 'Bonanza', left, 'Sekiyo', right, help make a red color themed garden.



ers are a good match for a basket or in a pot placed on a table to best show its sweeping branches. The branches are brittle and can break off when moved or trained. (Figure 5 'Sweet Emily Kate')

HOT AND SUNNY

When the garden is in full sun, we think of *Camellia sasanqua* and its close relatives *hiemalis* and *vernalis*. These "sun" camellias can be used to spruce up the small areas with a southern exposure like those between the house and driveway, or between adjacent homes where an older fence is beginning to look dull and tired. A hedge of 'Yuletide' with its neat small dark green foliage and bright blooming red flowers will look good all year long and provide a pleasing break between neighbors. (Figure 6: Row of 'Yuletide')

One or two colors make a pleasing garden theme. Low growing red and gold daylilies in the foreground provide summer color against the green foliage of fall blooming sun camellias. By using cultivars 'Bonanza', 'Dazzler', 'Kanjiro', and 'Sekiyo' the red colored flower theme can be continued. However, when more color variety is desired, there are many wonderful pink, white and bi-colored sun camellias to choose from. Three excellent pinks are 'Egao', 'Hugh Evans', and 'Jean May'. In addition there is the large fragrant pink of 'Bert Jones'. The lovely white with a rose border of 'Double Rainbow' is very appealing. The wavy petal with a deep rose pink on the white flower of 'Old Glory' is a striking new sun camellia. The white with lavender pink petal edges in the form of one star superimposed one another star makes 'Star Above Star' a winner in the garden and at shows. (Figure 7 'Sekiyo' or 'Bonanza')

COMPANIONS FOR CAMELLIAS

A small garden with camellias and choice companion plants adds interest, color and texture to a garden. Previously, shade companion plants impatiens, Hosta, and Ferns were noted. There are additional choices to pair with camellias. Traditionally the many azalea cultivars make excellent companions where shade or sun cultivars can be selected to fit the location. Shade perennials Astilbe, Coral bells, *Clivia miniata* can really enliven a small garden with their blooms and interesting foliage. In addition the many varieties of begonias and pansies can be treated as annuals where they serve as great foreground color plantings. In the sun, clumps of daffodils can be allowed to naturalize to give the gardener the delight of spring blooms followed by your favorite annuals.

CONCLUSION

There is no space too small for a lovely camellia garden. There are dwarf camellias, mid size bushes and small trees; there are cultivars that grow slowly and those that are vigorous and fast in their growth habit. The range of color tones is extensive. There are sun and shade loving camellias. By choosing early, mid, and late season blooming camellia cultivars and companion plants with flowers and interesting foliage, year round color can be had even in a small garden.



'Kanjiro' has great versatility and beauty. Shown here are different ways of displaying it in the garden setting.

COUNTER CLOCKWISE:

1. A closeup of flowers and buds that show 'Kanjiro's' beauty; 2. A tree; 3. An espalier'; and 4. A bonsai.



Spotlight: *Hiemalis* 'Kanjiro'

'**K**anjiro' is one of the very best sun camellias. In the Camellia Nomenclature it is listed as a species *Hiemalis*. *Hiemalis* origins are unknown but there is evidence that it is not a separate species. Most camellia researchers -- Sealy, Ming, and Parks -- consider it a form of *C. sasanqua* but Chang and Bartholomew believe it is a separate species. However, they all agree it is a natural cross between *sasanqua* and *japonica* that occurred many years ago. A typical *hiemalis* has small leaves and blooms in the fall.

While there is controversy in regard to its name and

origin, there is absolutely no controversy with its value to camellia people. It is one of the most reliable, beautiful, vigorous, tall-growing sun camellias. It is easy to propagate, thus available in many nurseries and garden centers, and it is highly valued as root stock because it is vigorous, disease resistant, and has a thick cambium layer. It produces numerous single to semi-double, small-to-medium flowers, with petals shading to rose red. It can be used as a single dramatic landscape specimen, as an informal hedge, or mixed with other sun camellias; it can be grown in a container or be espaliered and makes a beautiful bonsai. The spot light shines on the popular, versatile, and beautiful 'Kanjiro'. -- **Brad King**



Old gnarled roots and trunks give camellias a special effect

Story by Bradford King & Photos by Don Bergamini

The Higo Camellia Society of Kurume, Japan, held a Higo Camellia Bonsai show at Kumamoto Castel in honor of the International Camellia Congress meeting in Kurume, Japan on March 23, 2010

The castle was built by Kato Kiyomasa after the battle of Sekigahara. It is an incredible fortress and a beautiful place for a Camellia Show. Historically the area was called Higo Province and was renamed the Kumamoto Prefecture during the Meiji Restoration as part of the abolition of the feudal system.

The mission of the Higo Camellia Society, founded in Kumamoto in 1958, is to propagate and preserve the Higo camellia, and the Society lists 120 cultivars that meet their standards. The traditional way Society members grow a Higo is as a bonsai. A scion of the desired Higo is grafted on a wild camellia root and trunk and placed in a beautiful pot. The old gnarled piece gives the effect of age to the bonsai.



The American Camellia Society

The American Camellia Society is located at Massee Lane Gardens, 100 Massee Lane, Fort Valley, Georgia 31030, the headquarters of the organization. Executive Director is Celeste M. Richard, crichard@americancamellias.org, 478-967-2358. Established in 1945, ACS is a non-profit organization dedicated to the promotion of the genus *Camellia* L. and the education of the public about camellias. Contributions are welcomed to help further the goals of the Society and can be made to: The American Camellia Society, 100 Massee Lane Fort Valley, GA 31030. Contributions are deductible in the year made as allowed by law.

Join Us!

Members receive the annual American Camellia Yearbook and four issues of The Camellia Journal. U.S. Single/Joint: \$30; Foreign - Canada: \$44.50; Mexico \$55.50; Other: \$64.50.

Massee Lane Gardens

Massee Lane Gardens, the historical home of the American Camellia Society, is a 40-acre garden featuring the extensive camellia collection of the Society and several specialty gardens. Guided tours are always available in this year-round garden, where color follows color throughout the year. Two galleries feature the world's largest public display of Edward Marshall Boehm porcelains and other porcelain artists in the Annabelle Lundy Fetterman Educational Museum and the Stevens-Taylor Gallery.

Beautiful rental events are held in the spacious Gallery and gardens. For information and reservations call Lesia Dortch at 877-422-6355 or ask@americancamellias.org. Further information is available at www.americancamellias.org.

How to Find Us

ACS is headquartered at Massee Lane Gardens on SR 49 5.5 miles south of Fort Valley, Georgia. Fort Valley is intersected by US 341 and SR 96. Traveling S. on I-75, take exit 149 at Byron to SR 49 S.; go through Byron and Fort Valley. Traveling N. on I-75, exit 135 at Perry. Travel SR 127 W to Marshallville, turn right onto SR 49 N. Travel three miles to Massee Lane on the right. Gardens are open: Tues.-Sat.: 10 a.m.-4:30 p.m., Sun. 1-4:30 p.m. Closed Mondays. Please call for major holiday hours.

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The Camellia Journal

The Camellia Journal is published quarterly in March, June, September and December by the American Camellia Society..

Editor: Bradford D. King

Publications Editor: Roger Ann Davis

Advertising: Celeste M. Richard

The Camellia Chronicles:

Production: Roger Ann Davis

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The Camellia Journal (USPS 555-900) (ISSN 008 204X)

Published quarterly by the American Camellia Society in Fort Valley, GA. Four issues per year. March, June, September, and December. Subscription price is included in the annual membership dues. Periodical Postage paid at Fort Valley, GA and additional mailing offices. POSTMASTER: Send address changes to: The Camellia Journal, 100 Massee Lane, Fort Valley, GA 31030.

Something old ... Something new ...

Something blue...

Story and Photos by **Bradford King**

Do you like unusual and interesting camellias? Are you having difficulty finding a camellia for a narrow space in your yard? Do you need a ground cover for a hillside? Does your garden need some pizzazz? Would you like a camellia with lush foliage and lovely markings as a contrast to your other camellias? Do you have a landscape problem?

Perhaps this article will provide a solution or liven up your camellia collection. After all there

is a camellia available for almost any place in your home garden, whether an apartment patio, home garden or country estate.

SUNNY SPOTS

Camellias are usually described as acid loving, shade plants in garden books and magazines. While the most popular camellias are japonica, reticulata and hybrids, all of which do grow best in partial shade, don't overlook the sasanqua and other sun loving camellias. These cultivars have a number of desirable traits that help to extend your flower season and enliven the landscape by blooming in the late summer and autumn, and generally are profuse bloomers whose petals shatter when they fall, providing a lovely carpet of petals which won't cause petal blight. The flowers are bright and colorful and the small dark foliage stays beautiful all year even in full sun.

There are dozens of cultivars to choose from with many available in local nurseries. Three well-known older ones are: 'Jean May', which is light pink with double blossoms; 'Kanjiro', a brilliant rose red, semi-double flower; and 'Shishi Gashira', a semi-double to rose double form, bright rose red flower.

Looking for something new and different? Why not try 'December Rose'? It is a seedling of 'Egao' (a good choice itself). 'December Rose' is a semi-double, rose pink, large flower

Figure 1: 'Night Rider' is a semi-double hybrid that has a very dark, black-red, small flower which blooms mid to late season.

that grows on a vigorous upright spreading plant that blooms late, as compared to most sun camellias.

Looking for a new large white sasanqua to fill a sunny garden spot? 'French Vanilla' is a recent Nuccio's Nurseries' introduction which grows fast, is upright, and is somewhat spreading in growth habit. The large creamy white flowers are striking against the lovely evergreen foliage.

SPECIMEN CAMELLIAS

Something old! A mature *C. reticulata* in full bloom is an impressive sight. This is illustrated by 'Cornelian', a large, rose red, with striking patches of white, and semi-double to peony flowers that sport wavy petals. Many of the "original" reticulatas make a statement as a specimen tree.

Something new! The very popular *C. reticulata* 'Frank Houser' or its variegated form would do well. The very large, rose red, rabbit eared, loose peony flower is grown on a vigorous open and upright tree that has good branching and nice foliage inherited from its *japonica* parent. It looks good when small or large, unlike some reticulata cultivars that tend to look gangly, or have sparse leaves and branches. This is a wonderful but safe choice.

Let's take it up a notch. A Higo camellia with its mass of golden stamens, arranged like the spokes of a wheel, and bright colored, asymmetrical, single flowers gives you beautiful blooms and distinctive flower form. Selecting a Higo cultivar that grows vigorously can make for a great specimen. A few examples are 'Goshozakura' with profuse medium-sized pink flowers, 'Mangetsu' with medium white blooms, 'Jitsugetsusei' with a medium red flower with white markings, and 'Happy Higo', a large to very large, showy red flower. Looking for diversity? The approximately 280 different camellia species offer opportunities to grow camellias with different foliage, flowers, seed pods, and growth patterns. Most are hard to find except at special camellia nurseries like the ones that advertise in this publication. A number of camellia species are fragrant, the best of which is *C. lutchuensis*. It displays small white flowers that are very fragrant. When planted near a garden bench or path, they provide a special treat when in bloom. *C. grijsii* 'grijsii select' is a seedling of *grijsii* that is an improvement on its parent and equally fragrant with interesting foliage. Likewise there are some fine small yellow flowering species that make good additions to a camellia collection. The small, golden yellow flower of *C. nitidissima* (formerly called *C. chrysantha*) has shiny textured, cup-shaped flowers on a vigorous upright plant with heavily textured leaves. *C. tunghinensis* has many small pale yellow, cupped flowers and glossy green foliage. They fill an important niche with the ability to thrive and bloom in shade where other camellias won't. There are some large flowering camellia species that make good specimen plants. For example, *C. granthamiana* has abundant large, white flowers, deep green textured foliage, and takes sun, which makes it an excellent landscape plant.

Let's take it up another notch. The 'Pink Granthamiana', a large to very large, flat, single pink flower with notched petals, grows vigorously in an upright manner and has leaves like *Camellia granthamiana*. In 2010 Nuccio's Nurseries introduced *Camellia grandiflora*, a large, single, light orchid pink flower borne on an upright, sturdy plant.

CAMELLIAS FOR SMALL PLACES

There are several good landscape camellias whose growth habit



Figure 2. A closer view of 'Shibori Egao Corkscrew'.



Figure 3. 'Coral Delight' - Flowers are deep coral pink and the variegated cultivar is mottled with white.

is columnar and which fit comfortably in narrow places. Three fine sasanqua camellias like the sun and will thrive in a tight corner of a patio, provide a nice hedge or screen, or fill a narrow space. 'Rosy Pillar' has a medium single, rose pink flower with wavy petals. It has an average rate of growth and is upright and columnar. 'Slim'n Trim' has a single, deep rose pink flower and grows in a very tight and bushy columnar form, which makes it an excellent choice where space is limited. 'Starry Pillar' is another new camellia built for small places. It has a small, single white flower with occasional pink edges and buds.

If the narrow area is shaded, there are two japonicas that fit well in smaller areas. 'Red Hots' has lovely, dark green foliage and is compact, upright, and somewhat columnar. The tubular, bright red, small to medium, semi-double flowers with pointed petals provide a showy flower against the dark shiny foliage. 'Red Hots' leaves are among the most beautiful of any japonica. The stiff, upright, vigorous growth of 'Kick Off' remains columnar and



Figure 4: ‘Holly Bright’ is an unusual camellia that is a glossy salmon red with creped petals. The plant has crinkled foliage resembling the holly leaf and makes a very good landscape plant.



Figure 5: A variegated version of ‘Shibori Egao Corkscrew’, a good container plant.



Figure 6: The dark red, miniature anemone flower of ‘Lipstick’ with its white center petaloids is a visual delight and a show winner.

can be pruned to stay where you want it. The large to very large, loose peony flower that is pale pink and striped in a deeper pink, is very nice.

On the other hand if the area requires the plant to remain short rather than narrow, ‘Prima Ballerina’ is semi-dwarf. It can fit comfortably under house windows. The semi-double, light pink flower is very attractive and has wavy petals with darker pink edges. The slow growing, bushy, compact, but upright, form of camellia hybrid ‘Coral Delight’ and ‘Coral Delight Variegated’ also can be used in areas that require shorter camellias. The flowers are a lovely shade of deep coral pink and the variegated cultivar is mottled with white, making a striking appearance against the small dark green foliage. (Figure 3)

Looking to try to grow a tea camellia but have only limited space? Why not try *C. sinensis* ‘Moundy’? The Nuccios offer this sinensis seedling, which has a mounding compact growth pattern that can fit in a small shady spot. The flower is a single white and is a little larger than its parent.

GROUND COVER CAMELLIAS

The use of camellias as ground cover has been vastly overlooked. There are new cultivars which offer creative and attractive ways to handle a gentle hillside slope. A beautiful spreading camellia cover can enliven areas now planted with grass or overrun with weeds. The Huntington Gardens in San Marino, California, used a mass planting of ‘Dwarf Shishi’ on a hillside near the entrance to their Japanese Garden. It looks good all year long and has a profusion of bright red, miniature, semi-double blooms every fall. The planting is less than eighteen inches tall and requires little maintenance. If white flowers are preferred, ‘Dwarf Shishi White’ can be used instead. The low growing ‘Showa-no-sakae’ has soft pink, semi-double to loose peony flowers which grow vigorously and can be used as a ground cover. These three cultivars will do well in sun or light shade.

If you think out of the box, there are camellia species I would love to see someone try as a ground cover -- sorry no guarantees. *C. forrestii* has a small leaf and grows slowly and compactly like a shrub. It has tiny white flowers with the added bonus of fragrance.

FOLIAGE CAMELLIAS

Some camellias have leaf patterns which make them very at-

tractive and interesting.

For example, ‘Taiyo’ has rich green leaves with an irregular yellow pattern along its center and a medium, single coral rose flower. I grow it as a bonsai, but it would make a good specimen plant or a cluster of three or five would look good in front of taller camellias. It grows upright and is somewhat spreading. A second possibility is ‘Benten-kagura’, a foliage sport of ‘Dai-kagura’, which has irregular green leaves with a defined yellow gold variegation and a rose red, medium to large peony formed flower. A third example is ‘Hanadaijin-benten’, which has a green irregularly shaped leaf, bordered with a light yellow margin. It has a large, deep rose pink single flower. It grows slowly in an upright manner.

Other camellias with different leaf forms can make interesting additions to a camellia collection. The “Saw Leaf Camellia” (‘Nokogiriba-tsubaki’) has small leaves that are heavily serrated like a saw blade. The flower is a small, flat single. The strong, but very slow growing, ‘Gin’yo-tsubaki’ has small light gray-green leaves with narrow dark green margins that are heavily serrated and a small single red flower in a tubular shape. I grow it as a bonsai in a small rectangle container where it maintains its upright and compact form. ‘Kingyo-tsubaki’ (Goldfish camellia) has interesting fishtail-shaped, glossy green foliage. ‘Holly Bright’ is an unusual camellia in that it has a large, semi-glossy flower that is salmon red with creped petals. The plant has crinkled foliage resembling the holly leaf. It makes a very good landscape plant with a nice flower and interesting leaves. (Figures 4 and 9)

‘Egao Corkscrew’ is a sport of ‘Egao’ with a very distinctive zigzag growth. It makes an excellent bonsai or container plant where its beautiful, ruffled petals and pink semi-double or loose peony flowers make a great display. The variegated version is called ‘Shibori Egao Corkscrew’ and has a beautiful, pink-mottled white flower. I grow them both in pots and when in bloom they are moved to an outside patio for display. Perhaps you have an entrance way or other sunny garden location to enjoy the unique zigzag growth and lovely flowers. (Figures 2 and 5)

CAMELLIAS WITH UNUSUAL FLOWER FORMS

I find getting someone else’s perspective helpful in building a camellia collection. For example, my wife Lynn has an aesthetic



Figure 7: ‘Star Above Star’ is a lavender toned camellia, with white petals that shade to lavender pink on the edges.

eye and isn’t concerned whether a flower will be a show winner. She selected ‘Demi-Tasse’, ‘Cherries Jubilee’, and ‘Bob’s Tinsie’ after visiting a recent camellia show. She found their forms to be beautiful and different from the hundreds of other camellia flowers.

We both think ‘Demi-Tasse’ has a unique flower form. The small hose-in-hose, semi-double flower with a row of petaloids between the petals when correctly formed really does look like a cup and saucer. The peach blossom pink color is lovely. ‘Bob’s Tinsie’ is a miniature to small, brilliant red, anemone formed flower with a cluster of white streaked inner petaloids with brilliant yellow stamens. The bush has small foliage and is compact and upright which makes for a nice small hedge or container plant. ‘Cherries Jubilee’ has a medium to large, burgundy red flower with red and white petaloids that are semi-double or loose peony in form. The burgundy red color and contrasting white petaloids makes for a striking flower. The plant is a strong growing camellia that is rounded and full, making it useful for screening.

There are a number of miniature and small camellia flowers that shouldn’t be overlooked because of their size. The dark red, miniature anemone flower of ‘Lipstick’ with its interesting high center of white petaloids is a visual delight that can win at a camellia show. It grows slowly on a dense and upright bush. (Figure 6) Another anemone form flower that has an attractive and interesting high petaloids center is ‘Kewpie Doll’. It has a light pink, miniature to small bloom on a vigorous, bushy, upright plant.

The mass of a hundred or more yellow stamens of the irregular single flower of a Higo also makes it a good choice as a container

or bonsai camellia. Vigorous growing Higo cultivars were suggested for landscape camellias earlier in this article. The slow growing and compact ‘Ohkan’ (‘Okan’) has a lovely white flower with six to eight petals with a beautiful crimson border. The 160 stamens with white filaments and a light green pistil add interesting contrast to this medium flower. It blooms in mid season. I have several specimens as bonsai growing in a shady corner. When in bloom, I bring them to the patio for display. ‘Showa-no-hikari’ is a pink striped rose medium flower with white edges and a cluster of 200 or more stamens with white filaments. It grows upright at a medium rate and does well in the ground and is splendid in a pot.

NEW COLORS

Do we have a blue camellia? Unfortunately, the answer is no.

However, ‘Blue Bird’ is a saluenensis hybrid with a deep bluish pink, medium semi- double flower that is as close to blue as any camellia except the bluish purple red cultivar ‘Roosevelt Blues’ (aka ‘Frankie Bray’). It is a semi-double to peony japonica that can be found in older gardens or purchased at Bob Wines Camellia Gardens and Erinon Nursery. I was told this cultivar was named by people who were feeling very “blue” about President Roosevelt and the New Deal. Several nursery men also have reported that camellia growers don’t like and won’t buy blue toned camellias. Well, the variegated form of ‘Roosevelt Blues’ with the striking contrast of white on plum colored petals may change your mind.

There are also several lavender toned hybrid camellias that are



Figure 8: ‘Senritsu Ko’ is a light yellow flower with peach pink petal edges, and the flower is a small to medium formal double to rose form.

very desirable such as ‘Lavender Swirl’, a large, lavender pink, formal double, and ‘Little Lavender’, a lavender pink, miniature to small, anemone flower. For a sunny location ‘Star above Star’ is an excellent choice. The flowers are a lovely white semi-double that shades to lavender pink on the petal edges. The form also is different from other sun camellias as it is one star superimposed on another. This camellia makes for an attractive upright-growing plant as a specimen or in a mixed collection. This flower also will win as a species (*vernalis*) in camellia shows. (Figure 7)

As you know we now have yellow camellia species, creamy colored japonicas and hybrids. There are several new yellow hybrid cultivars available to camellia growers that also grow well in shade. ‘Ki No Senritsu’ is a soft yellow, peony to loose peony, small to medium flower. It grows moderately fast in an upright open manner. ‘Senritsu Ko’ has a light yellow flower with peach pink petal edges, and the flower is a small to medium formal double to rose form. The plant grows moderately fast and upright. (Figure 8)

Dr. Clifford Parks has introduced a new rose form, a double light yellow, which is a cross between *C. flava* and *C. japonica* named ‘Solstice.’ It is propagated by Camellia Forest Nursery.

‘Kagirohi’ is a formal, double medium yellow flower and a shy bloomer, difficult to obtain but with the most yellow of these new hybrids. All the yellows bloom in mid season.

Several camellia cultivars have very dark red flowers and are worth growing. The granddaddy of these dark toned camellias is ‘Kuro-tsubaki’ (“black camellia”). It has a small, semi-double, black-red flower with golden stamens. This japonica is semi-dwarf and grows slowly in a spreading manner. One of the older (1896) camellias from Japan, ‘Kuro tsubaki’ is one of the parents of ‘Night Rider’, a small semi-double hybrid that has a very dark, black-red, miniature to small, flower which blooms mid to late

season. The new foliage is a lovely crimson color which makes an attractive spring and early summer display. When young, it may be a light bloomer. (Figure 1)

If you are in the market, for a showy landscape *japonica* take a look at ‘Happy Harlequin’, ‘Oo-La-La’ and ‘Raspberry Ice’. ‘Happy Harlequin’ is a medium to large semi-double flower, veined strawberry pink with rose red stripes toning deeper at the center, and having a narrow irregular white border. It blooms early to mid season on a vigorous, upright, open plant. ‘Oo-La La’ has a long blooming season from early to late season. The blossom is a medium single to semi-double pink, striped red, with a white edge. ‘Raspberry Ice’ is a medium semi-double flower that is rose red with raspberry streaks and a wide white border.

Yes, there is a camellia for any location around your home and garden. By selecting carefully you can have camellias blooming for many months. When established, they are hardy and beautiful, require low maintenance, and have lovely green foliage all year long.

When grown in pots, they may be moved to a patio or choice garden spot to display beautiful blooms to family and guests. A morning cup of *Camellia sinensis* (tea) or coffee admiring newly opened flowers is a very pleasant way to begin the day. The late afternoon walk through the garden, alone or with loved ones, is a time to slow down, relax and enjoy the beauty of nature at its best.



Figure 9: ‘Egao Corkscrew’ a good container plant.



Figure 1: 'Tama Americana', left, and 'Tama-no-ura', right, make great landscape plants and produce show-winning blooms.

'Tama-no-ura': A camellia jewel

Story and Photos by Bradford King

This small to medium single japonica is a true camellia jewel with its bright red petals and wide band of white. The many blooms appear in early to mid season on slender branches. The plant grows rapidly in an upright open manner. It is a great landscape plant. It is also a show winning bloom, especially in trays of like blossoms where the uniformity of the small flowers makes a bright and cheerful presentation. (Figure 1)

'Tama-no-ura' was discovered in 1947 by Mr. Kichiji Tazaki, who was working at a charcoal pit in a forested area on Fukue Island in Nagasaki Prefecture, Japan. It is a chance seedling of unknown origin named after the town of Tama-no-ura where the charcoal pit was located. It was first exhibited in 1973 in Nagasaki City, Japan. It was propagated and introduced by Nuccio's Nurseries in 1979 and is now distributed internationally.



Figure 2: 'Tama Glitters'



Figure 3: ‘Merry Christmas’.

TAMA SEEDLINGS

‘Tama-no-ura’ is an excellent seed setting japonica cultivar which produces many flowers from early to midseason. It has been used primarily in the United States as a seed parent but growers in Japan have also used it as a pollen parent; consequently a few dozen Tama seedlings have been considered worthy of being given a cultivar name. (Figure 1)

Nuccio’s Nurseries has introduced nine cultivars to date with others being evaluated for future introduction. The first was introduced in 1991 and aptly named ‘Merry Christmas’ (Figure 3). This medium brilliant red with a picotee border has a single to semi-double flower which is larger than its ‘Tama-no-ura’ parent. It makes an excellent choice for a Christmas gift as it is often in full bloom in the holiday season. Subsequently eight seedlings with varying amounts of the genetic white border have been introduced. They are ‘Tama Americana’ (Figure 9), a rose red



Figure 4. Two flowers at top are “Tama Beauty” and the one at the bottom is ‘Tama Electra’.

medium semi-double with occasional petaloids; ‘Tama Bambino’ (Figure 7), a miniature rose pink peony; ‘Tama Beauty’ (Figure 4), a rose pink medium to large loose peony; ‘Tama Bell’, a miniature to small white, with red at the base of the petals in a bell like form; ‘Tama Electra’ (Figure 4), a small to medium brilliant bright red with an unreliable white border; ‘Tama Glitters’ (Figure 2), medium to large red semi-double to loose peony; ‘Tama Peacock’ (Figure 5), a small to medium single tubular semi-double maroon red washing to its white border; and ‘Tama Vino’ (Figure 8), a wine red small to medium semi-double. A number of these cultivars have won in camellia shows. In order of success for the 2008-2009 camellia show season they are as follows: ‘Tama Glitters’ (17); ‘Tama Peacock’ (13) and ‘Tama Americana’ (5). When ‘Tama Electra’ has a wide white border there is a striking contrast with the brilliant red making for a great flower, especially when well matched in a tray of three.

The Japanese have also produced Tama seedlings most of which are not grown in the United States. The late Mr. Tomita Kunitake bred seven from ‘Tama-no-ura’ seeds with pollen of unknown parentage. All of his seedlings carry the useful prefix “Tama”.

K. Kusumoto introduced three dark red with white edges using ‘Tama-no-ura’ x ‘Iwane-shibori’ -- a rose red variegated white medium semi-double that dates back to 1891 in Japan. Two other seedlings with ‘Tama-no-ura’ as the seed parent are known in Japan and three others used ‘Tama-no-ura’ as the pollen parent. Further details are available in the International Camellia Registry and the 2008 International Camellia Journal.

There are undoubtedly other “Tama” seedlings in other parts of the camellia world which have not been registered with the American Camellia Society.

WHAT IS IN THE FUTURE?

Since ‘Tama-no-ura’ readily set seeds and produces some pollen it is very useful for hybridizing. One goal is to continue developing new cultivars with the picotee border. Nuccio’s Nurseries collect a mass of seed every year from ‘Tama-no-ura’ and are evaluating a number of seedlings for possible introduction. One is a striking large single set against its white border tentatively called ‘Tama Velvet’. The biggest question is if this seedling will consistently keep its white border. If so, it would be introduced to the public. If not, it will be relegated to the back



Figure 5. ‘Tama Peacock’.



Figure 6. These lovely blossoms are from an unnamed ‘Tama’ seedling.

lots of the nursery.

A second goal is using japonica ‘Tama-no-ura’ crosses with other camellia species in order to develop additional color tones, fragrance, cold hardy, or repeat blooming camellias. Toward that end my breeding program uses ‘Tama-no-ura’ crossed with *C. azalea* and *C. amplexicaulis*. Seedlings have been produced but are a few years from blooming. Is it possible to cross this cultivar with *C. reticulata* hybrids? Who among us is up to the challenge of getting a white border onto a reticulata? Are you the one?

A third goal is to use the second generation ‘Tama-no-ura’ seedlings in a hybridizing program. I have used ‘Tama Americana’ and ‘Tama Peacock’ with a number of japonica cultivars and species *C. amplexicaulis* and *C. azalea*. ‘Tama Americana’ sets seed but not readily and has sparse pollen, while ‘Tama Peacock’ is a very good seed setter and produces pollen. What do you think of this seedling?

It is also reasonable to assume that other ‘Tama’ F1’s are fertile. We know that Walter Creighton successfully collected seed from ‘Tama Glitters’, a semi-double to loose peony, to produce ‘Alice Creighton’ (Figure 10), a formal double rose pink flower. It is a real beauty. Since it is a formal double, it is most likely sterile.

CONCLUSION

‘Tama-no-ura’ and its many progeny are wonderful camellia jewels in the garden. Their ability to pass along the genetic white border makes them highly desirable in hybridizing. However not all seedlings will receive this trait. I have a number of unremarkable red seedlings. However, all is not lost as they make great root stock because most have inherited good growth habits. It is also interesting to evaluate seedlings and compare them for similarities and differences with existing “Tama” introductions, for example, ‘Tama Glitters’ and my seedling, ‘Tama-no-ura’ x ‘San Dimas’. What do you think? Since this is its first flower it will continue to be evaluated.

‘Tama-no-ura’ is a cultivar for beginners and advanced camellia breeders who enjoy the joys and frustration of developing camellias with the highly desirable picoteed border. If you have never ventured into growing camellias from seed, this cultivar is one of the best with which to begin. The simplest way to is to let bees do the fertilization and collect the seeds in late summer and fall. I can attest to how much fun this adds to the enjoyment of growing camellias. Why not give it a go?



Figure 10: ‘Alice Creighton’, created from the seed of ‘Tama Glitters’.

RIGHT - Figure 7:
‘Tama Bambino’



BELOW - Figure 8:
‘Tama Vino’



RIGHT - Figure 9:
‘Tama Americana’



A closer view of a cluster of ‘Tama-no-ura’ blossoms in the landscape.

THE CAMELLIA CHRONICLES

Nuccio's Nurseries celebrate Diamond Jubilee

Nuccio's Nurseries celebrated 75 years of business with a party jointly given by the Southern California Camellia Society and the Nuccios by inviting faithful customers from Southern California and the nurseries employees. The gala event was held under a beautiful California live oak which provided shade to the more than 100 guests on Sunday, June 13. The guests of honor were Bonnie and Julius Nuccio.

It was amazing to see so many Camellia people together at one time. Great food was punctuated by just a few speeches leaving guests to enjoy friends, especially the Nuccio family.

Julius Nuccio and his late brother, Jim, began propagating camellias and azaleas in their parents' backyard in Alhambra, California in 1935. During World II while Julius served in the Army, the business took a hiatus. Giulio Nuccio, their father, bought land in Altadena in the foothills of the San Gabriel Mountains near the end of the war. This was a family enterprise then, and one that continues today in Altadena.

Jim and Julius began breeding their own camellias in the 1940's. In 1950 they introduced their first camellias, 'Katherine Nuccio', 'Primavera', and 'Warrior', to the public. The Nuccios have introduced at least 130 camellias and 103 azaleas.

They have developed friendships with camellia growers throughout the world. In one of many trips to Japan, Julius acquired Sat-suki azaleas, which means "fifth month" in Japanese. These plants bloom from mid-April through June, thus providing beautiful late blooming flowers. On a later trip to Nagasaki, Japan, he imported 'Tama-no-ura', the now famous single flowering, red bloom with a genetic white border.

We are indeed fortunate in having Nuccio's Nurseries still in business because dozens of other nurseries have not been able to survive. When you look back to the 1950's you will see ads and announcements of new camellia introductions that we still grow and appreciate, but the originating nurseries are no longer with us. For example Tuttle Brothers Nursery in Pasadena introduced the lovely salmon pink, formal double 'Mrs. Tingley'; Kramer Brothers Nursery in Upland, where 'Kramer's Supreme', a large,

scarlet red, double peony form won the 1957-1958 Margarete Hertich award; and McCaskill Gardens of Pasadena, which introduced 'Star Above Star', a lovely, lavender white flower with pink petal tips, arranged as one star superimposed on another.

How did Nuccio's Nurseries survive when others failed? Family, Family, Family -- Joe's son, Julius, who began working full time at the nursery in 1957; followed by Julius's two sons, Tom in 1972, and Jim in 1980 -- that is how.

The camellia world salutes the Nuccio family as they complete their diamond jubilee year. - **Brad King**



Jim and Julius "Jude" Nuccio



A day for big smiles - Sergio Bracci, seated, a long time member of the ACS board, Julius Nuccio, Tom Nuccio, and Bob Ehrhart, a current ACS board member and a past president of ACS.



Tom Nuccio, left, Jim Nuccio, Carol Schanz, President of the Sacramento Camellia Society, and Jude Nuccio.



Tom Nuccio, center, Matt Hunter, and Doug Ruhren at Nuccio's nurseries.

Photos by Bobbie & Melvin Belcher



Spotlight: *Camellia japonica* 'Magnoliaeflora'

C*amellia japonica* is the most widely grown and most popular of all camellia species in America and are grown extensively in Australia, New Zealand and Great Britain. In addition, camellias have made their way into many European countries. There are accounts of Camellias in Portugal as early as the 16th century. The sea faring Portuguese traded with many Asian countries, and it is most likely that the first camellias came to Portugal from Japan. However there are camellias in the Channel Islands, the Azores, Madeira (The Flower Island), Spain, Italy, France, Belgium, and Germany.

The camellia world admires the wonderful flowers, lovely evergreen foliage and smooth bark of this shade loving plant, which has been cultivated for hundreds of years as an ornamental plant and as a source of edible oil. The original *Camellia japonica* var. *japonica* is widely distributed in China, Japan, and southern Korea. The flowers are red and pink but rarely white. It became a highly valued plant in

Japan where it was grown and hybridized for centuries. More recently hybridizers in Australia, America and New Zealand have produced a wide range of varied colored flowers. There are also striped and variegated blooms. There are tiny to very large blooms with flower forms from simple to complex. In addition there are japonicas that are cold hardy.

'Magnoliaeflora' looks like a magnolia flower and is a heavy bloomer which is how this camellia got its American name. The Japanese call it 'Hagoromo', which means "feathered robe", referring to the traditional clothing of an angel in Japanese folklore. This camellia has also been called 'Jordon's Pride', 'Rose of Dawn', 'Angel's Robe' and 'Cho- No- Hagasane'. Regardless of which name is used it is a lovely blush pink hose-in-hose semi-double flower that grows on a compact plant which produces a midseason mass of flowers that makes a wonderful display. It is one of the classic *Camellia japonicas* that is grown and enjoyed through out the camellia world. - BRADFORD KING



HAPPY HIGOS

The Higo camellia is a strain of *japonica* with some *rusticana* in its background. A Higo is distinguished by the 100 to 250 stamens that flare out to form a central sunburst. The classic bloom is an asymmetrical single with 5 to 9 large petals and a dense center of beautiful long stamens. In Japan the irregular form is considered an asset because it serves to emphasize the symmetry of the striking stamens. The flower color is always bright and pure. Blooms may be white, cream, pink, rose, crimson, and various combinations.

A Japanese gardener first described the



Higo Camellia in 1829. Priests and the Samurais did the original propagation. The Samurais are the noblemen warriors of old Japan who devoted themselves to the arts, gardening, and scholarly activities. They grew camellias to please the Emperor and their masters. Devotion to these masters and respect for parents and ancestors was their moral code. This code was instrumental in creating an interesting custom of planting a deceased relative's favorite camellia in the family cemetery. In this way Higo camellias left the palaces and temples to become more wide spread in the Kumamoto region of Japan. The Higo peaked from 1826 to 1860 with as many as 100

These two blossoms are large, flat, red singles -- each a Happy Higo -- introduced by Nuccio's Nurseries . This Higo style camellia grows vigorously, blooms in midseason and is very showy with its large red blooms.

**Story and Photos
by Bradford King**



Figure 1: 'Okun' blooms in midseason.

cultivars. Unfortunately, the Japanese Civil War of 1877 and the two World Wars destroyed many of the Japanese camellias.

However, in 1958 the Higo Camellia Society was founded in Kumamoto, Japan, to propagate and preserve the Higo camellia. The Society lists 120 cultivars that meet its standards with many of them developed recently. Higo is the ancient name of the city of Kumamoto, which is on the island of Kyushu in the south of Japan. The traditional way to grow a Higo is as a bonsai. A scion of the desired Higo is grafted on a wild camellia root and placed in a beautiful pot. The old gnarled root gives the effect of age to the bonsai. The bonsai is best displayed when the plant is 2 feet by 2 feet to show the trunk, bark, leaves and blooms to best advantage. The leaves and flowers are the same size when grown as a bonsai or in the ground.

Higos make excellent landscape plants and do very well in pots where the full height and width can be appreciated. Higo culture is identical to any other japonica. They are clearly not a separate camellia species. Higo camellias are not frequently grown in the United States, perhaps because the uneven single blooms are not appreciated. The few times they have been entered in shows they haven't competed well with other *japonicas*. Most would be placed in the small or medium classes. However, Higo cultivars make an interesting addition to a camellia collection. Some Higo flowers have a lovely scent which is another reason to grow them. Higo flowers generally drop in one piece rather than shattering. This self grooming trait is greatly appreciated.

The model Higo is very well represented by 'Okun'. The aesthetic principles in Japanese are called "*go ben senkaku*". 'Okun' has the five ("*go*") petals; arranged on a flat plane ("*ben*") with three main petals creating a triangle ("*senkaku*"). A first class Higo like 'Okun' also is required to have a mass of dense beautiful long stamens arranged like the spokes of a wheel. (Figure 1). It has a lovely white flower with a striking crimson border. The 160 stamens with yellow anthers supported by white filaments surrounding the light green pistil add interesting contrast to this medium flower. It blooms in mid season on a compact slow growing plant. I have several specimens as bonsai where they

grow in a shady corner. When in bloom, I bring them to the patio for display. 'Okun' is a sport of 'Yamato Nishiki' which is a first class Higo flower. It is interesting that 'Okun' has itself mutated twice: 'Kyo Kkokan' which is pink with a crimson edge, and 'Nagoi No Haru', which has a soft pink border on a white flower with a splendid center of over 200 stamens

The naming of a Higo camellia is a creative endeavor. There is an attempt to choose a flower name that picturesquely describes the spirit of a place, or natural phenomena, that the flower represents. For example, generations of Japanese people have loved and appreciated the majestic Mount Fuji. Therefore a simple and beautiful white Higo was named 'Fuji'.

If you enjoy fragrant camellias there are a number of Higo to choose from. 'Nio Fukurin' (Perfumed Border) is a medium dark pink with white borders that may have episodic red stripes. 'Nioi Fubuki' (Scented Snow Storm) has a delicate scent that wafts up from the white flower with rose stripes. It is a medium-to-large, wavy, single flower with a high crown of 150 stamens. No wonder it has been used to breed new fragrant cultivars. Meyer Piet used it as a parent for the lovely white anemone flower, 'Bessie Dickson'. 'Nioi Beni' is a lovely scented seedling of 'Nioi Fubuki'. If you are looking for a crimson red perfumed Higo with 150 stamens, this is a good choice for the garden as it has long well spaced branches and dark green foliage.

There are other red Higo camellias that look outstanding in the garden, such as 'Higo Hagoromo' (Angel's Feathers), 'Hi No Maru' (Face of the Sun / Japanese flag), 'Kuni No Hikari' (Scarlet Skirts), and 'Shiranui' (mysterious evening lights on the sea)

If you prefer pink flowers there is 'Asagao' (Morning Glory), 'Goshozakura' (Cherry Blossoms in a Palace Garden), 'Miyako No Haru' (Spring in the Ancient Capital of Kyoto), 'Ozeki' (Figure 2), and 'Tenju' (Long life).

The official Higo Camellia variegated list is represented by 'Yamato-nishiki' (Figure 3). The six to eight white petals with wide crimson stripes and 200 stamens make it a classic Higo.



Figure 2: 'Higo-ozeki' is a pink version of the Higo. (Photo by Jim Campbell)



Figure 3: 'Yamato-nishiki' a variegated version -- white petals, crimson stripes.



Figure 4: 'Jitsugetsusei' a red flower with variegated white blotches. (Photo by Jim Campbell)



Figure 5: 'Showa-no-hikari' a pink striped flower with white edges.

There are also red flowers with variegated white blotches on 'Jitsugetsusei' (Host of heaven) (Figure 4). The red bloom represents the sun, yellow stamens the moon, and the white blotches the stars. 'Showa-no-hikari' (Light of Showa) (Figure 5) is a pink striped rose flower with white edges which I grow as a bonsai. It has a very lovely flower. "Showa" is the name of a Japanese historical period that ended in 1988. The lovely single medium flower of 'Mikuni-no-homare' (Figure 6) is veined pink with an occasional red stripe with a white border. The petals undulate and the 150 stamens flare. 'Nanakomachi' (The Seven Faces of Beauty) is pink with crimson stripes which may be wide or narrow. It has five or six curly petals and a cluster of 150 to 200 yellow stamens.

There are a few Higo style camellias available in the United States that have not been officially recognized by the Japanese Higo Society, but are very desirable landscape camellias. Nuccio's Nurseries has introduced a large to very large flat red single called 'Happy Higo'. This Higo style camellia grows vigorously in an upright open manner and blooms in midseason. It is very showy with its large red blooms. Meyer Piet developed

'Yoshiaki Andoh' (Figure 7), a dark red, medium-to-large single with flared, golden stamens that grow vigorously in a compact manner. It blooms mid to late season. It has *C. reticulata* in its parentage which means it is technically not a *japonica* Higo, but it has a flower form that we associate with Higo, a single, flat, irregular with a mass of stamens. The hybridizers, Piet and Lee Gaeta, named it for their Japanese friend, 'Yoshiaki Andoh').

The Higo camellia has had a long and illustrious career in Japan as a bonsai and as a landscape plant dating back to the Samurai Warriors. In Japan it is valued for its bright single flowers highlighting the splendid mass of yellow stamens arranged like the spokes of a wheel. Its aesthetic appeal is in its asymmetrical form with the three main petals forming a triangle. In the United States the single irregular formed flowers have not endeared them to show judges. It is clear that there are many differences in appreciation of the aesthetics of flower forms. Many camellia growers enjoy the Higo as a welcome addition to one's garden or bonsai collection. It is an added bonus that some have lovely scented blooms. When you are looking for a bright beautiful camellia with a unique form, why not make it a Higo.



Figure 6: 'Mikuni-no-homare' has the occasional red stripe.



Figure 7: 'Yoshiaki Andoh' named for a Japanese friend.



Summer Care of Camellias

Jewels of the Sky - Hummingbirds some of the most welcome visitors in any Camellia garden

Story and Photos by Bradford King

Summer care of your camellia collection will depend on local conditions. I live in Southern California where there is no rain-fall all summer and it is generally hot and dry. The East coast has humidity and summer showers, with areas at times in a drought; consequently no rules apply everywhere camellias grow. Therefore this article will focus on the basic principles needed to care for your camellias during the summer.

WATER

First and most importantly in the summer care of camellias is to provide adequate moisture. During the growing season new branches and leaves are flushing out and growing, and this requires an abundance of water. If this is supplied naturally by rainfall all the better, but in dry areas or during droughts camellias will require frequent water. When there are local water restrictions during droughts it is recommended to water deeply once or twice a week depending on local conditions and the water restrictions. Well established plants will survive even if there is some loss of flower buds. In average soil, once-a-week deep

watering with periodic sprinkling on the foliage will be adequate. Drip irrigation systems save water by directly applying moisture to plants. Automatic systems are convenient but provide water based on a timer, not the needs of the plant, unless controlled by a hydrometer. The key is to keep the camellia moist at all times. It should never be allowed to dry out or become soggy.

FERTILIZATION

Fertilization begins as soon as a camellia stops blooming in the spring and new leaves are pushing out. While well established camellias can grow and bloom without fertilizer, it is a good practice to fertilize every six to eight weeks from April through August. A commercial camellia azalea fertilizer will include needed trace elements, iron and a balance of nitrogen, potassium and phosphorus, which are the three numbers listed in the content analysis. There are two cautions when using a dry commercial fertilizer. If over used they will burn the camellias (brown leaf edges) and the plants must be moist when it is applied. It is also helpful to "drill in" the dry mix with a liberal amount of water from a hose.

Two favorite show flower fertilizer programs have been used

Hummingbirds, Lady Bugs, Dogs and People visit Camellias

during the growth season with excellent results. The dry method uses 5 parts cottonseed meal, 1 part blood meal for added nitrogen, and 1 part iron. This, too, will need to be watered in. Blood meal is a “hot” fertilizer (13-0-0). The formulas used for iron may include nitrogen, if greater than 3; there may be too much nitrogen when combined with blood meal and cottonseed. The water soluble fertilizer method is biweekly application of Miracle-Gro (30-10-10) for camellias and azaleas or a similar product. This is a very high level of nitrogen for camellias which will not harm large well established japonica camellias but may burn small plants and most certainly the nonreticulata hybrids; therefore it is recommended to use it at half the manufacturer’s directions, reducing the strength to (15- 5- 5).

Small camellias (one gallon or less) especially in containers may benefit from a light feeding once a month. Camellias in bonsai dishes, baskets, and decorative containers will greatly benefit from light monthly feedings.

Seedlings require more fertilization to get them larger and stronger. I use Miracle-Gro Quick Start (4-12-4) for the first two years. This, or a similar product, is formulated to enhance root development. After two years a liquid bloomer mix of (11-54-4) at half strength is used during the growing season. During the winter when camellias are in dormancy, the level of nitrogen should not exceed 3, for example, you can use the Quick Start at half strength (2-6-2), or a similar product.

Many people who compete in camellia shows will continue to fertilize with a low nitrogen fertilizer (2-10-10) every 45 days during the fall and winter to get the best show flowers. It is believed that a small amount of nitrogen (1 to 3) is better than a 0- 10-10 or similar number combination. The key is to keep the nitrogen low so that new growth doesn’t force the camellia to break dormancy.

DISBUDDING

If you plan on entering flowers in a camellia show, it is a good practice to begin disbudding once it is easy to distinguish the flower bud from the leaf bud. The flower bud is rounder, growing plump as it matures, than the adjacent, slender-pointed leaf bud. Generally, the central bud at the tip of a branch is left with all other buds being removed. If desired a bud two to three inches below also may be left. In hot dry weather, when disbudding, mist spray the area to reduce water loss through the wound, because sometimes the remaining bud turns brown and will drop off due to loss of moisture.

Generally sun camellias (*sasanqua*, *hiemalis*, *vernalis*) and cluster blooming cultivars are not disbudded as their beauty is in the profusion of flowers. If you don’t plan to compete in camellia shows, there is no need to disbud, just enjoy more flowers

INVADERS OF THE WORST KIND

Fortunately, camellias are very hardy and generally have few problems with insects. One exception is that new camellia leaves are very tasty to aphids that can damage the new foliage. You will be able to see them on the buds and leaves or notice the new leaves are folded in on themselves, and when opened, aphids and eggs can be seen. Frequently ants also will be present. They herd the aphids using the body fluids for food. It is best to get rid of both of these invaders. Water sprayed on aphids will wash them off the leaves, which is inexpensive and a safe way to get rid of them. Soapy water (“Safer”, an insecticidal soap) also can be made or purchased and applied with a spray bottle.



Puppy Katie enjoys camellia petals as a snack.

A more serious pest is “spider” mites. Mites flourish in hot weather and damage the leaves making the camellia less vigorous and healthy. The leaf looks grayish green, or “dusty”, but is not dirty, and has small dark spots on the underside. Soapy water, or other products, such as Safer insecticidal soap or Bayer insect and mite control, can be applied to small camellias with a spray bottle. Alternatively, especially for numerous large camellias, a light summer oil is sprayed on the infested plant, using care to get the underside of the leaves where the mites thrive. The light oil smothers the mites and the application will need to be repeated every two weeks to get those hatching from eggs. Generally three applications will control mite infestations. The oil makes the leaves a shiny green which looks good, but if used near the window of a house can lead to a window cleaning project.

I have heard a number of stories of dogs digging up small camellias and young children emptying camellia pots. I use the Boy Scout motto: “Be prepared.” However, if there is a disaster, make it a “teachable moment” rather than losing one’s cool. Some of my favorite times as a child were learning from my parents and grandparents about gardening. These experiences are the foundation for a life-long interest in gardening and a passion for camellias.

For me the invaders of the worst kind are the night raids by skunks and opossum, which as they look for grubs, turn over small pots of seedlings and young plants. Cleaning up, repotting, and the loss of plant labels is a frustration to be avoided. I have

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Disbudding: Before and after excess buds were removed. If you plan on entering flowers in a camellia show, it is a good practice to begin disbudding once it is easy to distinguish the flower bud from the leaf bud.

solved this with wire fencing around seedlings and packing plants close together.

VISITORS OF THE BEST KIND

There are several insect visitors to the summer garden that are very much welcomed. Lady Bugs will prowl the leaves of many plants, including camellias, looking for their favorite food — aphids, but also will eat scales, mealy bugs and mites. They can be purchased from garden shops. I spread them around the garden in the evening after watering the plant foliage. Some will settle down to drink, eat, and lay eggs in little clusters under leaves. When the eggs hatch, the larvae look like little black alligators with orange spots. The larvae also eat insects. They are nature's way of controlling aphids and are, therefore, greatly appreciated.

The praying mantis, when patiently waiting to prey, looks like a miniature cartoon character praying, and it is another of Mother Nature's ways of controlling pests. Egg cases may be purchased from local nurseries or mail order garden catalogs. When first hatching, there are 100 to 200 mantids ¼ inches in size that hatch from the egg case seam. They eat many insects, aphids, thrips, white grubs, beetles, chinch bugs, flies and mites as well as other small insects including each other. By late summer the four inch male is dwarfed by the six inch female. The adult mantis will eat small and large grass hoppers, leaf hoppers, caterpillars and occasionally even hummingbirds. I watched with fascination a full grown female one September on the leaves of a hanging geranium that was seven inches from a hummingbird feeder patiently waiting to strike at the fast flying hummers coming and going. She was very patient, sitting still for two days during daylight and hiding out in the planter at night. This time she was unsuccessful. I moved her to the camellia garden the third day. However, there are credible reports of successful hunting of hummingbirds.

Hummingbirds migrate through the west and east coasts and visit the home garden in the summer. They are the jewels of the sky and one of the favored guests to the summer garden. My garden is full of these jewels that fly like helicopters one moment and tiny fighter jets the next. They hum and buzz as I change the feeder full of sugar water. They also love camellia flowers, especially the red ones, making frequent visits for food. During winter months a male sits in camellia 'Wildfire' guarding the feeder. He drives off all other males and most of the females. The Anna's hummingbird is an all year resident in Southern California. We also have the Allen's, which migrates along the Pacific

coast, with many wintering in Southern California. On the Atlantic coast there is only one hummingbird, but it is a little beauty. The small slender male with the ruby throat is a real flying jewel. The Ruby Throated Hummingbird migrates along the Atlantic coast from South America to the Northern States and Canada.

People, especially children, are the most welcome visitors to the camellia garden. They are energetic, curious and open to learning about camellias. My neighbors' children are frequent visitors. We talk about school, local happenings and bits of camellia information. Pearl was pleased to know there are

camellias that share her name. She looks lovely with 'Nuccio's Pearl' in her hair., while her sister Melody tries unsuccessfully to appreciate the fragrance of 'Ki-no-senritsu', but is impressed that a camellia is known in English as Golden Melody. They come to see our puppy, Katie, who also loves camellias, especially the 'Katie' blossom. When given a chance she enjoys camellia petals as a snack.

CONCLUSION

While camellias will survive with little care, they will thrive when provided adequate moisture and periodic feeding. Your reward for summer care is larger and more beautiful, well-conditioned flowers. Camellias are queens of the fall and winter garden when other plants are leafless and resting up for blooming in spring and summer. Invest in your camellias and you will receive dividends. I guarantee it.



Lady Bugs among the best visitors as they prowl the leaves looking for their favorite food — aphids. They also eat scales, mealy bugs and mites. They are nature's way of controlling aphids and are, therefore, greatly appreciated.



Spotlight: *Camellia Reticulata* 'Dr. Clifford Parks'

The breeding of *Camellia reticulata* hybrids in America began in 1948, and the efforts of many hybridizers have now produced more than 220 new reticulata hybrids. One of the most successful camellia breeders is Dr. Clifford Parks. Early in his career, when he was at the Los Angeles State and County Arboretum in Arcadia California, he began to make controlled crosses between *reticulata* cultivars and a variety of other camellia species. He continued this program when he moved to Chapel Hill, North Carolina, and has introduced the following reticulata hybrid cultivars: 'Buddha's Child', 'China Girl', 'Crimson Candles', 'Dot Spengler', 'Dr Clifford Parks', 'Dr. Gordon Richmond', 'Gladys Parks', 'LASCA Beauty', 'Moon Festival' and 'Scarlet Temptation'. The two most popular introductions, 'LASCA Beauty' and 'Dr. Clifford Parks', are both strong growing plants that produce show quality flowers.

Dr. Parks is also a pioneer hybridizer of cold hardy camellias. He introduced seven cold hardy cultivars of camellia japonica, known as the April series for their spring blooming season, plus two fall-blooming, cold hardy cultivars, and 'Red Jade' that blooms late January to February.

If this wasn't enough, Cliff has a long standing interest in collecting and preserving Camellia species. He has collected and planted numerous wild camellia seeds and recently donated many of these plants to Massee Lane Gardens to provide the garden with a world class species collection.

The camellia spotlight is turned on 'Dr. Clifford Parks', a cross between *reticulata* 'Crimson Robe' and *japonica* 'Kramer's Supreme'. It is a very large beautiful red flower with orange tones that are reminiscent of fire flames. It comes in various forms from semi-double to loose peony, to peony, and even anemone. --BRADFORD KING

*'Nuccio's Gem',
right, has medium-
to-large, semi-double
to rose-form double
bloom.*

**Photos by
JIM DWYER**



THE BEST OF 'THE BEST' IN WHITE

Similarities and differences in camellia preferences

STORY BY BRADFORD KING

In the American political scene the pundits discuss and obsess about the differences between the blue and red states. The fantasy football gamers Twitter about who is better -- Paton Manning, Tom Brady or Brett Favre -- when the game is on the line with two minutes to play. In the camellia world we are not as likely to Twitter or obsess as we are to discuss and at times loudly proclaim which cultivar is number one. We give blue ribbons, a Best of Show and awards to the best "White Camellia".

The similarities and differences in our opinions, preferences, and strongly held beliefs are certainly part of human nature. This came to life for me several years ago when serving on the American Camellia Society Exhibitions and Awards Committee. We were discussing which cultivar deserved to be acclaimed the "Best White". First, it is not a California show category, so we

get the initial difference right off the start. Second, one committee member from the South assertively proclaimed 'Melissa Ann' was without a doubt the only way to go.

Well, difference number two -- I had never even heard the name at that time. Why, I asked, is it better than 'Nuccio's Gem'? A second committee member from Northern California stated "Sea Foam" is a much better white, formal double. Well, I knew the name but had never seen it in any Southern California Camellia Show. Chalk up difference number three. As time passed I saw both of these lovely white camellias in gardens and shows but never in Southern California. Artie Johnson from TV's Laugh In, who you know if you are a "heritage age camellia grower", would say "Verrrry Interesting". Why is this so?

There are a number of explanations. One is local availability of the cultivar. For example Southern California camellia growers get most of their plants from Nuccio's Nurseries. Since they do not propagate either 'Melissa Ann' or 'Sea Foam', their intro-

duction, 'Nuccio's Gem', which has been available for 40 years, became more familiar to those in Southern California even though it is known world wide. 'Sea Foam' also is a medium-to-large, formal, double-white camellia, but is a late bloomer that likes cool temperatures, which makes it more difficult to grow and show in Southern California in March and April when it is hot and dry. However, it is readily available in the South at Bob Wines Camellia Gardens, Erinon Nursery, County Line Nursery, and Loch Laurel Nursery.

'Melissa Ann' is a large-to-very-large, striking, and loose-to-full peony with attractive yellow stamens. It was introduced in Biloxi, Mississippi, by Dr. L. Audioun in 1995. It is a regular show winner in the South. It is clearly a great large white camellia that is not easily available in California and since there is no show category for white camellias it has never caught on.

So which is the best white camellia? There are cultivars that grow better in different areas of the country which account for availability and popularity. For example the lovely, large peony to formal, double-white flower of 'Swan Lake' originated by Monrovia Nurseries of Southern California grows and blooms well in California but is prone to die back in Georgia, according to Mark Crawford of Loch Laurel Nursery. Therefore, it seems geography, availability, familiarity, and local show customs lead people to form perceptions and judgments about which is "best".

Of course you may have a different opinion or point out what is missing in my analysis. I agree that there is more to be said about all of this. I agree with you that knowledge, experience and judging skill are part of your personal choice for "best" white, red, pink, small, medium or large. I would also agree with you that camellia judging has a rationale and objective system that is improved when judges are well educated and experienced.

DO WE AGREE OR PART COMPANY WHEN IT COMES TO HEAD TABLE VOTING?

I agree with Mel Belcher, a very experienced judge who chairs most of the Southern California camellia shows head table judging. Let's say there are 12 medium japonica flowers on the head table. A careful scan of the class may reveal six with great color, form, size, and condition for that cultivar. Perhaps most are the perfect image of that flower. How does one vote for first place? Personal preference is what Mel and I would say. No, no say the naysayers. We unabashedly retort: "There is nothing wrong with having a personal preference". Yes, it is based on familiarity and personal opinion, but so what? We love what we love and vote accordingly at the head table. The first place is based on all the judges' votes, not just a few, so the first place is chosen in a rational and fair manner.

For those of you keeping score, 'Sea Foam' received 68 points, 'Melissa Ann', 20, and 'Nuccio's Gem', 14, in the 2008-2009 camellia show season. Do the numbers resolve the question of "Best White" camellia? 'Melissa Ann' is a large-to-very-large and thus in a different class. She is a loose to full peony in flower form. This is like the arguments of who is pound for pound the best fighter when comparing Mohamed Ali, a heavy weight, with Sugar Ray Robinson, a middleweight. They are both great, but who is the greatest? Mohamed Ali, himself, loudly proclaimed, "I am the greatest". But fight fans counter that Sugar Ray won more fights in a more competitive class. Before long a new fan tells us he thinks



'Melissa Ann' is a large-to-very-large, striking, camellia, a regular show winner in the South.

Sugar Ray Leonard was even better than both of them. Can we ever agree of who is "The Best"?

Since 'Sea Foam' and 'Nuccio's Gem' are medium-to-large, formal, double blooms, the numbers favor 'Sea Foam'. This is like the computer ranking for the college championship that combines strength of schedule, several rankings by coaches and press using mathematically weighted numbers, leaving most college football fans unhappy with the system unless their favorite team is playing in the championship. Did 'Sea Foam' get its points gibbed, protected, in a medium open class, trays of like blooms, in best white only? Will we be satisfied when we know all this? Probably not! We like what we like -- "perception is reality".

Will the 'Sea Foam,' given to me this year by Miles Beach, ACS Board secretary and certified judge of Mount Pleasant, South Carolina, become the first winner in Southern California? This reminds me of the Santa Anita Breeders Cup horse race. Can an eastern bred filly win against the stallions in California? I know Zenyatta did it this year on the track, but can I do it with 'Sea Foam,' or will a northern Californian grower beat me to it?

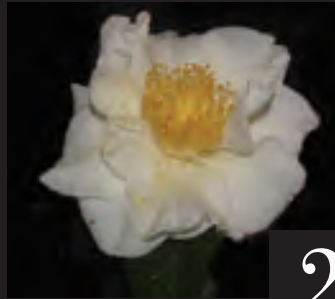
What do we agree on? The last several years, regardless of geography, the best reticulata has been 'Frank Houser'. In the 2008-2009 season, this flower received 203 points with its variegated form ranked number two with 124 points. These numbers far exceed the number three: Ruta Hagmann with 66 points. It seems we are all familiar with 'Frank Houser'; we grow it and show it. Is it the best reticulata? Golfer Tiger Woods was voted the best athlete of the decade by the Associated Press two weeks after his marital infidelities became public, resulting in loss of face and endorsements and public media flogging. He beat out cyclist and cancer survivor Lance Armstrong, who was frequently accused but never found guilty of using performance enhancing drugs, and tennis great Roger Federer, who was almost perfect in center court wins until his nemesis Nadal beat him.

We confidently proclaim 'Frank Houser' is the best reticulata of the decade. Is it unanimous? No way. Its growth habit is only average, it is common – and even its hybridizer was not impressed. We are told that "familiarity breeds contempt", but I say it leads to preferences and to our views as to the "Best Camellia".

Do you know your Whites? A camellia quiz.



1.



2.



3.



4.

T

here are many great white japonica flowers. Can you find the cultivar name that goes with its picture?

The skill in identifying flowers is in the details of form, size, shape, petals and stamens.

Studying your misses is one of the best ways to increase your ability to indentify flowers.

NAMES

- A. Man Size
- B. Margaret's Joy
- C. Silver Triumph
- D. Silver Tower
- E. Ragland Supreme

- F. Junior Prom
- G. S nowman
- H. Snow Chan
- I. Silver Waves
- J. Purity

ANSWERS, Page 25



5.



6.



7.

8.



9.

10.



Great families



of camellias in the flower world

The most famous “family” of sports begins with ‘Betty Sheffield’ of Quitman

STORY AND PHOTOGRAPHS BY BRADFORD KING

IN AMERICAN POLITICS there are a number of famous families like the Kennedys and Bushes. Likewise in the camellia world we have some great families of flowers that deserve attention. There are the numerous sports from ‘Elegans’ (Chandler), aka ‘Chandleri Elegans’, a family that began in England and came to the United States just like the first settlers came to this country on the Mayflower. The most famous “family” of sports to originate in the United States begins from ‘Betty Sheffield’ of Quitman, Georgia. Sports are genetic mutations in a plant’s characteristic, and these can be changes in flower form or color, leaves, branches and growth habit. The reasons for mutations lay buried deep within the plants genetic makeup. In camellias there are many japonica sports but very few sasanqua and no known reticulata



‘Betty Sheffield,’ a loose peony, white flower, striped and blotched pink, has over 20 color variations. Photograph by Miles Beach.



'Elegans' (Chandler) - The 'Elegans' family began in England and was grown from seed.

mutations. The genealogy of these two wonderful camellia families follows.

'ELEGANS'

The 'Elegans' family began in England in 1831. 'Elegans' was grown from seed by Chandler and Booth. She is a lovely pink anemone formed flower that has mutated into a dozen new "sports". This "grandmother" herself produced four sports: 'Elegans Miniata', a light lavender pink medium anemone form flower; 'Elegans Supreme', a rose pink with deep serrated petals; 'Elegans Improved', a growth sport with larger flowers and leaves than its parent; and 'C.M. Wilson', a light pink flower with white edges. 'C.M. Wilson' appeared in the garden of Mrs. A.E. Wilson of Florida in 1949 and was named for her husband. There is also a variegated form of 'Elegans' which has a sport named 'Barbara Woodroff', a light orchid pink outer guard petals and cream white center petaloids. This cultivar was introduced by William Woodroff of Sherman Oaks California. 'C. M. Wilson' is a lovely light pink sport of 'Elegans'. It has thrown three sports: 'Hawaii', a pale pink peony form with fimbriated petals; 'Shiro Chan', a white flower with occasional pink at the base of the petals; and 'Elegans Splendor', a beautiful light pink edged with white serrated petals. Each of these sports has mutated into other flowers. 'Hawaii' begot 'Kona', a full tight peony with fimbriated petals which is green before it opens and is an unusual green-toned white flower when it is fully open. Kona may be a town in Hawaii but the flower looks like it was made by an Irish leprechaun. 'Kona' begot 'Maui', a large heavy white anemone form with rippled guard petals. 'Shiro Chan', when it is pure white, is called 'Snow Chan'. It was introduced by the Nuccios in 1957 and is listed as a sport in the Camellia Nomenclature, but most camellia people including the Nuccios now concede it is the same flower.

The very showy 'Elegans Splendor' produced the most beautiful sport of this lineage when it morphed into 'Elegans Champagne'. This large to very large white flower with a creamy center of petaloids grows on a bushy plant with serrated leaves that are very distinctive.

All in the 'Elegans' family ...



'Elegans Miniata'



'Elegans Variegated'



'Elegans Improved'



'Elegans Supreme'



'Barbara Woodroff' has light orchid pink outer guard petals and cream white center petaloids. This cultivar was introduced by William Woodroff of Sherman Oaks, California.



'C.M. Wilson', a light pink flower with white edges, appeared in the garden of Mrs. A.E. Wilson of Florida in 1949 and was named for her husband.

Capturing a 'sport'

Sudden changes in flowers, leaves, or branches signal that a mutation may be taking place ...

The growth of a plant involves continual cell reproduction. When a cell divides two chromosomes with similar genes are produced. When a gene copy varies from the original gene this is a mutation. When a mutation occurs in the growing part of a camellia we say it has "sported".

The sudden appearance of a change in a plant's flowers, leaves or branches is the first sign that a mutation may be taking place. This is most obvious when there is a change in the flowers color. Typically a small branch on a solid colored cultivar suddenly produces a flower different in color than is typical for this camellia.

These mutations are a valuable source of new cultivars. If you come across one in your garden, it should be labeled. Tie a piece of colored yarn or place a plant label on the twig or branch that produced the new flower. This will identify it the next blooming season. If it continues to produce the new color, you have been lucky enough to have captured your own sport.

If you and other camellia growers find it interesting, it is worth propagating as a new cultivar. This is done by grafting one or more scions on rootstock and/or taking cuttings from the mutated branch. --
Bradford King

The offspring of 'C.M. Wilson'...



'Hawaii'



'Shiro Chan'



'Elegans Splendor'

PHOTO BY GENE PHILLIPS



'Kona'



'Snow Chan'



'Elegans Champagne'

'BETTY SHEFFIELD'

There are over 20 color variations of 'Betty Sheffield'. Many are unstable with a tendency to return to a solid pink or red flower. 'Betty Sheffield' is a loose peony, white flower, striped and blotched pink. While an attractive bloom in its own right, it has been surpassed by many of her descendents. The most desired are 'Betty Sheffield Supreme', 'Betty Sheffield Coral', 'Elaine's Betty', 'Funny Face Betty' and 'Betty's Beauty'.

'Betty Sheffield Supreme' is one of the loveliest sports of 'Betty Sheffield'. It was discovered in 1957 by Mrs. Green of Alday, Georgia. The flower has a loose peony white flower with various amounts of deep pink on the petal edges. 'Betty Sheffield Coral' is a medium-to-large, semi-double to loose peony flower with a nice coral pink flower. It readily sets seeds and grows upright, making it a good potted plant or landscape camellia.

'Elaine's Betty' has a pale peach center with occasional rose red stripes and spots shading to deeper pink on the petal edges. It won 86 times in the 2008-2009 camellia show season. Elaine and Jim Smelly of Moss Point, Mississippi, introduced her to the camellia public in 1996. 'Funny Faced Betty' (a.k.a. 'Charming Betty') has a medium to large pale pink with occasional deeper pink stripes. The lovely 'Betty's Beauty' (a.k.a. 'Rudy Moore') was discovered in 1976 by Rudy Moore at the Huntington Gardens in California. It is a very beautiful white flower edged with a fine rose border.

As you can see, the Sheffield family began in the south and traveled throughout the camellia growing states reaching the west more than thirty years ago. This parallels the history of American people, who also, as they moved west, added new members to their families. It also reflects the indomitable American dream that our children equal or exceed us.



'Maui'

'Approach Grafting' A Way To Get Two for the Price of One, and It's Easy and Fun

By Bradford King



The new potted camellia is placed next to the "mother" camellia so that the main trunk of the container plant intersects with a branch of the mother plant and grows in a vertical position. - Photos by Bradford King.



One camellia in the pot, one in the landscape can make your garden look more complete.

The approach graft offers the camellia grower a variety of helpful methods to propagate and enhance a camellia collection. First it can be used to propagate a new camellia cultivar on a large in-ground specimen. Second it is an excellent way to inoculate a camellia plant with virus in order to get the highly desirable white markings on a camellia flower. In addition it is the best way to increase virus in a camellia that has not been producing attractive variegated blooms. Finally, the approach graft can be used with seedlings in order to help them reach maturity in half the time.

FAIL SAFE GRAFTING LARGE CAMELLIAS

When you have a lackluster landscape camellia in your garden, you can cut it off and perform the standard cleft graft or you can maintain the landscape plant while adding a new cultivar. This is the beauty of the approach graft. The landscape camellia, or "mother plant", will support one or more new cultivars. Place the new potted camellia next to the "mother" camellia in such a way that the main trunk of the container plant intersects with a branch of the mother plant and grows in a vertical position. The potted plant is attached to the "mother" plant at this junction. Both of the plants are marked at the point they intersect. A clean cut is made on the "mother" plant so that the smaller trunk of the container plant fits into the cut. The bark is scraped off both branches, exposing the cambium layer at the union, and the junction of the two is tightly bound together with non adhesive plastic tape.

The best time to do this is spring, but it is also successful until early summer. The tape may be removed in the fall once a callus has formed that covers the union. In the spring of the following year the mother plant is pruned, and it is possible to prune, leaving only the new graft. However this may leave a barren spot in your garden so more selective pruning may be desirable. In fact the container plant may be left attached for years with no adverse affects. However once the new graft is growing well the potted camellia may be cut below the union point. Now you have two of the same cultivar-- one in the landscape and one in a pot. Two for the price of one is another advantage of the approach graft. It is possible to add new cultivars to the mother plant which will provide different colors, sizes and forms of flower, and makes for a very distinctive and interesting garden display. The approach graft is a virtually fail safe way to improve the quality of your camellia collection.

CAMELLIA VARIEGATION

Approach grafting can be used to intentionally introduce virus into a non-variegated plant or to add new virus to an already infected camellia. The two most widely used camellias for variegation are 'Adolphe Audosson variegated' and 'Shibori-egao'. The virus camellia is attached to the non-virused camellia using the approach graft method described above. A variation of this strategy is to repot a three gallon non-virused camellia and a one

gallon virused camellia together in a wide five gallon pot. This will allow for a number of branches to be spliced together. The more the virused plant branches are attached to the target camellia the stronger the infection. The virus moves through the cambium layer and over time it spreads, infecting flowers and leaves though out the cultivar. You can personally witness the spread of the virus. For example, I observed the leaves of a 'Royal Velvet' become yellow streaked after I attached it to a virused 'Debutante'. This occurred after the 'Debutante' broke dormancy in the spring. The blooms the following January and February showed white blotches indicating viral transfer. The 'Royal Velvet' below the graft point initially showed no viral symptoms. The non-virus lower portion of 'Royal Velvet' became infected in the fall. The virus is transported by specialized cells, xylem upward and phloem tissue between leaves and roots. Xylem carry water through the plants from roots to shoots, and the phloem carry sugar and nutrients.

It is frustrating when a variegated flower has only a few white marks. For a quality show bloom the virus needs to produce a wide and even distribution of white throughout the flower. There are two basic strategies to correct this problem: first, be patient and hope the virus will spread on its own, and second, add virus as discussed earlier in "Approach Grafting".

Many of us are looking for just the "right" variegation. At this time we have no reliable method of producing a specific white marking on a bloom. We have few clues to the different strains of virus and what they produce. It is generally believed there are at least three and possibly as many as six strains of the camellia virus. Usually a trial and error approach is used. However to improve the odds, it makes sense to use viral plant material that has produced flowers with the desired white markings. For example, one of the most desired variegations is the "moiré" white pattern; therefore, using a cultivar that produces moiré white flowers makes sense.

SEEDLINGS IN HALF THE TIME

A new seedling takes five to seven years to produce its first flower. If the seedling is attached to larger rootstock, a variation of the approach graft, it will bear flowers in three years or less depending on the cultivar. The larger the rootstock the more roots there are to push new vegetation and the sooner the camellia will flower. This is especially useful in developing new cultivars. For example, John Wang is eager to know the results of his hybridizing program. He uses this strategy to produce flowers in a few years. I have also begun to use it with seedlings of *C. azalea*, which have a difficult time growing on their own roots, and it reduces the time until they bloom. I plant the seedling in the pot with the rootstock. The top of the root stock is cleanly cut off, a cut is made in the trunk, and the new seedlings' miniature trunk is lightly scraped to expose the cambium layer which is inserted in the cut of the rootstock. This variation of the approach graft is held together with a small piece of tinfoil. The graft may be covered with a zip lock bag or the whole container may be covered with a plastic bag supported by two wire arches. In this method the seedling will have two root systems – its own and the root stocks. I believe that having twice as many roots will generate more foliage and produce blooms sooner. If one root system fails or is sluggish, the other is there to back it up.



Repot camellias together, allowing for several branches to be spliced together. The more virused branches are attached, the stronger the infection.



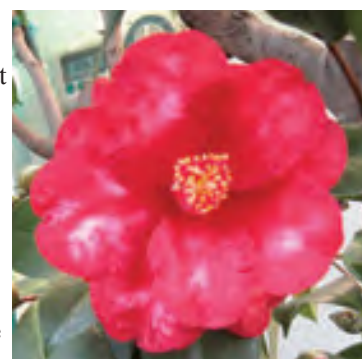
Attaching seedling to a larger rootstock will hasten flower bearing.



Planting seedling in the pot with the rootstock gives the plant two root systems to support it.

CONCLUSION

Approach grafting is not rocket science, but if NASA uses back up systems why can't camellia growers do the same? The approach graft keeps alive two plants. One fuels the other until it takes off and can support its self. Just like a rocket launch, the first stage of the rocket drops off after driving the second stage into orbit. The approach graft is a versatile grafting method that has a built-in back up system, making it virtually fail safe. It is also easy and fun to do.



BRADFORD KING



Spotlight: *Camellia reticulata* 'Cornelian'

C*amellia reticulata* is native to open woodlands in the Chinese province of Yunnan, and today at shrines and temples throughout the province you can see 300-year-old cultivars of the species. For hundreds of years, it has been hybridized with *C. pitardii* var. *yunnanica*, and many garden cultivars are available. Blooming in midwinter to early spring, they are some of the most spectacular flowering trees in the world.

The rest of the world first encountered *C. reticulata* in 1826 in Kent, England. It was imported from Canton, China, by Captain Richard Rawes, and the botanist John Lindley recognized it as a different species from *C. japonica*. He named it *C. reticulata* based on the distinctive network of indented veins in the leaves. This first *reticulata* known to the Western world was named 'Captain Rawes'. It proved to be sterile, tender and difficult to propagate except by grafting.

In 1948 twenty Yunnan *reticulata* plants were imported to California by Ralph S. Peer of Hollywood and Walter Lammerts of Descanso Gardens in La Canada. One of them was 'Damanao' (Large Cornelian), which we know today as 'Cornelian'. It has one of the most beautiful flowers of the original imports: very large, informal double to peony bloom, red to rose pink marbled white; the petals are wavy, crinkled, spiraled with a few petaloids in the center. The plant grows vigorously with large "reticulated" leaves.

This cultivar has been widely propagated throughout the world because of its wonderfully variegated flowers and excellent growth habit.

Stirling Macoboy, the noted Australian garden author, wrote about 'Cornelian': "It is a spectacular bloom ... a jewel of a flower." ~ **BRADFORD KING**

'Flirtation' is a profusely blooming, sun-tolerant non-reticulata hybrid with silver-pink tubular flowers.



'Old Glory' is a new *C. sasanqua* with upright medium growth from Nuccio's Nurseries. Its white semidouble flower has a deep rose border and the wavy petals look like a flag waving in the breeze.

Landscaping with Camellias

How to design camellia beauty and usefulness into your garden

STORY AND PHOTOGRAPHS BY BRADFORD KING

This article will help you incorporate camellias — beautiful flower producers and handsome versatile shrubs -- into your home landscape. Remember that camellias grow naturally as shrubs and small trees under the canopy of large trees, and these conditions need to be recreated for them around your home. This can

provide a landscape design that is equally pleasing for you as well.

A stand of pines, a cluster of white birch, a large oak, tulip tree or *Ginkgo biloba* offer opportunities for the shady condition that camellias prefer to thrive. If larger trees are not already in your garden, consider adding them as part of a landscape design.

The large, creamy white flowers of 'French Vanilla' make it a great landscape camellia.



Shade may also be provided by a house, shade cloth, lath or an attractive pergola. *Camellia sasanqua* will grow in direct sun and makes wonderful landscape plants. Camellias may be used for a number of landscape situations, including foundation planting, hedge or specimen tree, or on a patio or terrace.

DESIGNING YOUR LANDSCAPE

The design is the blueprint that guides the creation or modification of your garden. The results should be harmonious, pleasing and practical. A good design will have unity and fit your lifestyle. While some home-owners will hire a landscape architect, I prefer to create my own garden design. The planning and creating is too much fun to pass on to someone else. Some of you may hire a gardener to plant and groom for you. I like the digging and getting my hands in the earth. I also like the

exercise and concrete satisfaction of accomplishment as a counterpoint to the stresses of modern living.

The first step is to study your site. I observe, ponder and do several preliminary sketches that fit the site. I look at them critically and seek input. I come back to them and make changes. When I am satisfied with a general design, I add the camellia cultivars. This does not need to be a complicated program involving new trees and dozens of camellias — it can be as minimal as adding a single specimen camellia.

CAMELLIAS FOR FOUNDATION PLANTINGS

Japonica cultivars are the premier plants for shady landscape foundation plantings (at the base of the house). As long as they get partial shade from trees or are on the north or east side of the home, they

will thrive and bloom — assuming they are kept moist and are planted in a loose, acid soil rich in humus. Possibilities are almost limitless. In Pasadena, California, 50-year-old 'Pink Perfection', 'Debutante', 'Daikagura', 'Tricolor' ('Siebold'), 'Herme' and 'Purity' bloom and provide pleasing evergreen foundation to small homes and mansions alike year after year. In the Southeast many homes are graced with older *C. japonicas* and heirloom cultivars.

Recently the Southern California Camellia Society pruned a vintage member's heritage camellias, which is all the plants require beyond water and possibly cottonseed meal once a year. I would never recommend removing old plants, but what about grafting newer cultivars on the 'Tricolor Siebold' and 'Purity'? I recommend choosing the forms and colors you personally prefer. When I grafted on 'Pope Pius IX', a landscape camellia in my garden, I chose cultivars that are show-winners and excellent landscape camellias: *C. japonica* 'Betty Foy Sanders' and 'Carter's Sunburst'. Since I wanted more non-reticulata varieties, I picked 'Freedom Bell' and 'Anticipation'. Interestingly, 'Anticipation' is now highly variegated as the 'Pope Pius IX' had become infected with the common camellia white blotch virus — a fortuitous success that has created a more striking bloom.

Choosing camellias is like buying art. Only purchase what you really like. If you like formal doubles choose them, but be advised that formal double flowers do not generally open in the beach areas in Southern California; there you might choose 'Nuccio's Carousel', a semidouble with a soft pink-toned, deeper at the edges bloom, or 'Tiffany', with its coral pink peony flower. If your favorite color is pink, 'Elizabeth Weaver' and 'Nuccio's Cameo' are two great pink formal doubles. For the best white flower, many in the South would choose 'Melissa Anne', while others prefer the anemone form of 'Elegans Champagne', the semidouble 'Silver Waves', the peony form 'Silver Chalice', or the formal double of 'Ragland Supreme' and 'Swan Lake'.

One design option is to choose foundation plants with a theme. A friend consulted me about using camellias for his north-facing home in the foothills of Southern California. He chose a three-tiered foundation planting of 'Red Bird' azalea



The show-quality blooms of 'Nuccio's Carousel' in light pink with deeper pink edges, makes this a striking landscape camellia.

for the front, 'Nuccio's Gem' for the center and 'Grand Marshall' for the back. This made a striking display with the large ruffled hose-in-rose, brilliant red in the front, the medium, white formal double flower in the middle, backed up by the rich deep red of the anemone flower of 'Grand Marshall'. The design is very personal to him because he is a big fan of the Rose Parade, thus the 'Grand Marshall', and he loves formal double flowers and gemstones, thus 'Nuccio's Gem'.

After the home owner moved to Atlanta, I went to see how the camellias that he left behind were doing. The new owner had totally removed the 5-foot camellias and the 2-foot azaleas and put in 6-inch hibiscus and a 1-foot privet hedge. With the house facing north and the San Gabriel Mountains looming up a half a mile away, the hibiscus will find mountain frost too cold and the summer heat ideal for white flies. In addition the new owners get to pay a gardener to prune the flowerless privet hedge four to six times a year. If they had kept the camellias, all that would have been required would be minor pruning every few years to keep the plants

looking neat and tidy and from blocking the windows. (Fast forward six months: As predicted the hibiscus are dead and a lovely 8-foot red maple is planted too close to the house — I guess some people do need a landscape architect. Likewise my heart was broken when I drove by the recently-sold home of the hybridizer Meyer Piet to find his 200 40-year old camellias, including all of his introductions, bulldozed. What a loss to the camellia world!)

CAMELLIAS FOR A HEDGE

There are camellias for sun, partial sun or shade that can be used as a hedge. Many *C. sasanqua* cultivars can serve as colorful fall-blooming hedges in direct or partial sun. One of my favorites is 'Yuletide'. It has a brilliant orange-red, single flower with bright yellow stamens and blooms during the Thanksgiving to Christmas season. It is a sturdy, compact and upright plant with small dark green leaves, and it makes a wonderfully neat evergreen hedge. If you like fragrance, try 'Bert Jones', which has large semidouble, silver-pink flowers. If the planting space is limited in width, try 'Slim 'N Trim' from Nuccio's Nurseries;

it has a single deep rose pink, medium bloom on a tight, bushy columnar plant. One of the best Japonicas for full or partial sun is 'Covina'; it is a rose red, small semidouble that blooms profusely. If you like peony-formed flowers and the area is in partial sun, a good choice is 'Debutante' with its lovely pink flower.

Many *C. japonica* varieties can be used as a hedge or screen in partial shade. The key is to prune lightly and remove dead branches. The use of electric hedge trimmers keeps a plant looking neat but will destroy most buds. Hired gardeners particularly like to use hedge clippers, which is why I don't allow them to touch my camellias. If I wanted a neat and heavily pruned shrub with no flowers I would plant privet, the traditional English garden hedge.

SPECIMEN CAMELLIAS

If you have a spot for showing off one specimen plant, ask yourself, what is the one camellia I must have? For me it would be *C. reticulata* 'Frank Houser', a beautiful, very large rabbit-eared, rose red bloom, growing on a vigorous, upright, nicely shaped small tree with good foliage. It has

lots of blooms, set seeds and the flower can get even better when “gibbed”. The blooms look great on the plant, lovely in a vase and will win at shows.

If you are looking for a specimen camellia for a sunny area there are many Sasanquas to choose from. There are old favorites like the profuse, pink ‘Hugh Evans’ or the brilliant rose red of ‘Kanjiro’. I like some of the newer sun camellias from Nuccio’s Nurseries, such as ‘French Vanilla’, a large creamy white single, ‘Double Rainbow’, a semidouble white with a rose border, or ‘Old Glory’, white with crinkled lavender pink edges, semidouble flowers.

CAMELLIAS FOR A PATIO, TERRACE OR ENTRY COURT

Historically the patio is an architectural form introduced to Spain by the Moors in the 7th century. Ancient Moorish courtyards were enclosed with walls, open to the sky and decorated with fountains and enlivened with plants. Today a small patio may be designed as a charming and attractive home entrance, which could be the place for a choice camellia espaliered against a wall with camellias, azaleas and other plants in pots and tubs. An intimate patio, entirely enclosed and entered only from the master bedroom, could be used for meditation and reading. Here a small fountain surrounded by azaleas, camellias, ferns and annuals in pots would make a peaceful sanctuary.

The most popular home patio is designed for family enjoyment and entertaining, often partially enclosed and protected by a roof or pergola which provides partial sunshine and shade for socializing. It’s also ideal for camellias and other plants in pots, tubs and hanging baskets. I like to put blooming foliage camellias in hanging baskets. Two good candidates are ‘Egao Corkscrew’ and ‘Taiyo.’ A number of patios have concrete planters or raised beds on two or more sides. For example, my son and his wife have decorated their covered patio with a number of *C. japonica*, *Clivia*, annuals and tender perennials like impatiens and begonias, which are all planted in attractive raised brick beds next to a koi pond. It is the center of outdoor family life.

A terrace also offers dramatic planting opportunities — each plant assumes an importance in this smaller, intimate outdoor area. With careful planning a succession of camellia blooms may be enjoyed for six months. Beginning in fall there are many *C. sasanqua* camellias

blooming. In late fall and early winter I recommend the lovely blooms of *C. vernalis* ‘Egao’, ‘Shibori Egao’ and ‘Star above Star’, as well as *C. hiemalis* ‘Kanjiro’ and ‘Shishigashira’. Winter is prime camellia-blooming season with literally hundreds of choices. Cultivars like ‘Tama Americana’, ‘Wildfire’ and ‘San Dimas’ will bloom early to mid-season, then mid-season bloomers like ‘Margaret Davis’, ‘Grand Prix’, and ‘Royal Velvet’ will take over. Late-blooming camellias follow, such as *C. japonica* ‘Glen 40 Variegated’, ‘Maroon and Gold’, plus non-reticulata hybrids ‘Nicky Crisp’ and *C. reticulata* ‘Harold L. Paige’.

A number of circular driveways have center areas that need to be landscaped. A tree makes a wonderful focus, plus it provides shade and beauty. I recommend trees with non-invasive roots for locations near pavement — no one wants a driveway damaged by a tree’s developing roots. Personally I like the beautiful European white birch and the interesting fan-shaped leaves of *Ginkgo biloba*. In fall both have lovely yellow foliage.

Of course, trees provide shade for you to enhance with camellias. The lovely evergreen foliage of *C. japonica* will look good all year long and give you colorful flowers in the winter months. If you live in areas not suitable for *C. japonica*, don’t give up. There are cold-hardy (up to zone 6) camellias. Fall-blooming cultivars like ‘Winter’s Star’, ‘Snow Flurry’, ‘Winter’s Charm’ and others in the “Winter” series are good selections. Also there are cold-hardy spring bloomers such as the “April” series: ‘April Dawn’, ‘April Tryst’ and ‘April Kiss’. Other cold-hardy cultivars that do well in the landscape include ‘Crimson Candles’, ‘Korean Fire’ and ‘Blood of China’. A list of cold-hardy camellias is provided in the *Camellia Nomenclature* 2009 edition published by the Southern California Camellia Society.

ONE LAST THOUGHT

Landscape design is about more than just planting your favorite camellia. What are the plants’ purposes? How do camellias fit in and enhance the garden? Is the focus on winter bloom and its color? What do they contribute when not in bloom? Does the foliage add to the impact? I recommend considering these questions, getting feedback, and choosing what you want. It’s your garden and your life to enjoy for many years. ■

The American Camellia Society

The American Camellia Society is located at Massee Lane Gardens, 100 Massee Lane, Fort Valley, Georgia 31030, the headquarters of the organization. Operations Manager is Celeste M. Richard, crichard@americancamellias.org, 478-967-2358. Established in 1945, ACS is a non-profit organization dedicated to the promotion of the genus *Camellia* L. and the education of the public about camellias. Contributions are welcomed to help further the goals of the Society and can be made payable to:

The American Camellia Society, 100 Massee Lane Fort Valley, GA 31030. Contributions are deductible in the year made as allowed by law.

Join Us!

Members receive the annual *American Camellia Yearbook* and four issues of *The Camellia Journal*. U.S. Single: \$25; U.S. Joint \$27.50 (to one address): Outside U.S. as above plus air postage.

Massee Lane Gardens

Massee Lane Gardens, the historical home of the American Camellia Society, is a 40-acre garden featuring the extensive camellia collection of the Society and several specialty gardens. Guided tours are always available in this year-round garden, where color follows color throughout the year. Two galleries feature the world’s largest public display of Edward Marshall Boehm porcelains and other porcelain artists in the Annabelle Lundy Fetterman Educational Museum and the Stevens-Taylor Gallery.

Beautiful rental events are held in the spacious Gallery and gardens. For information and reservations call Lesia Dortch at 877-422-6355 or ask@americancamellias.org. Further information is available at www.americancamellias.org.

How to Find Us

ACS is headquartered at Massee Lane Gardens on SR 49 5.5 miles south of Fort Valley, Georgia. Fort Valley is intersected by US 341 and SR 96. Traveling S. on I-75, take exit 149 at Byron to SR 49 S.; go through Byron and Fort Valley. Traveling N. on I-75, exit 135 at Perry. Travel SR 127 W to Marshallville, turn right onto SR 49 N. Travel three miles to Massee Lane on the right. Gardens are open: Tues.-Sat.: 10 a.m.-4:30 p.m., Sun. 1-4:30 p.m. Closed Mondays. Please call for major holiday hours.

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International Camellia Soc.: American Horticultural Soc.: American Public Gardens Assoc.: National Council of State Garden Clubs: Royal Horticultural Soc. .

The Camellia Journal

The Camellia Journal is published quarterly in March, June, September and December by the American Camellia Society.

Editor: Bradford D. King
Managing Editor: Bill Marken
Design Specialist: Keith M. Whitney
Production: Walton & Walton Advertising
Advertising: Celeste M. Richard

The Camellia Chronicles:

Production: Walton & Walton Advertising

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The Camellia Journal (USPS 555-900) (ISSN 0008 204X)

Published quarterly by the American Camellia Society in Fort Valley, GA. Four issues per year: March, June, September, and December. Subscription price is included in the annual membership dues. Periodical Postage paid at Fort Valley, GA and additional mailing offices. POSTMASTER: Send address changes to: The Camellia Journal, 100 Massee Lane, Fort Valley, GA 31030.

Flower Forms

Here's a guide to recognizing the six types of camellia blooms—plus other ways to distinguish the amazing array of camellia flowers

STORY AND PHOTOGRAPHS
BY BRADFORD KING

Thanks to thousands of natural crosses over hundreds of years and breeding efforts by mankind, we are now blessed with flowers that are far more complex and much more interesting than the original wild camellias. We have come a long way from wild species such as *C. japonica*, *C. sasanqua* and *C. saluenensis* and their single blooms. *C. reticulata* generally develops semidouble, and occasionally formal double or loose peony, form flowers.

Anyone who is serious about camellias sooner or later will encounter the classification system used for flower forms. Getting familiar with it will add to your appreciation and understanding of the world of camellias.

Here we follow the classification of flower forms used in the *Camellia Nomenclature* (2009 edition), which in the tradition of earlier editions divides blooms into six well-established types.

'Ohkan'

1 SINGLE FLOWERS

The typical single bloom has one row of five to eight petals with conspicuous stamens. The petals may be regular, irregular or loose, and they may include petaloids. The classic *C. japonica* Higo has irregular petals and massive numbers of flared stamens such as 'Ohkan'. Many *C. sasanqua* camellias, both new and old, continue to produce single flowers such as 'Yuletide'. A good illustration of a small single *C. japonica* is 'Tama-no-ura'. The single flower is almost always fertile. It has a functional pistil (female structure) and many stamens (male structure) that produce pollen. Therefore it is capable of being both a pollen and a seed parent.

'Yuletide'



2 SEMIDOUBLE FLOWERS

Two or more rows of nine or more petals that encircle the prominent stamens define this form. The petals may be regular, irregular or loose. Old favorites like 'Adolphe Audusson' and 'Magnoliaeflora' are good examples. Many newer cultivars like 'Wildfire', 'Grand Prix' and 'Nuccio's Carousel' are also semidouble. Many of the Williamsii hybrids (cross between *C. saluenensis* and *C. japonica*) are semidouble flowers, as are newer non-*C. reticulata* hybrids such as 'Nicky Crisp'.

In the semidouble form some of the stamens are converted into petals, which reduce the bloom's capacity to

produce pollen, but generally there is adequate pollen for use in hybridizing. In addition the flower has a functional pistil and is capable of producing seeds. Therefore we can conclude that semidouble flowers are fertile as both pollen and seed parents. However, there is variability in level of fertility among cultivars. I have found that 'Magnoliaeflora', 'Wildfire', 'Nuccio's Carousel' and 'Nicky Crisp' readily set seeds in controlled crosses and chance crosses in my garden. However 'Adolphe Audusson Variegated' and 'Grand Prix' are weak seed setters. In addition 'Grand Prix' has little or no usable pollen.



3 FORMAL DOUBLE FORMS

Formal doubles have many rows of overlapping petals with no stamens showing. The symmetrical petals frequently have a center cone of tightly furled petals. Petals may be flat, cupped or curved. *C. japonica* examples are 'Nuccio's Bella Rossa', 'Donnan's Dream', 'Nuccio's Pearl', 'Pink Perfection' and 'Sawada's Dream'. 'Valentine Day' is an outstanding formal double *C. reticulata*.

The formal double flower is completely sterile. The complete transformation of both stamens and pistil to petals marks the total foregoing of its sexual functions. After destroying 50 formal double flowers of 'Nuccio's Bella Rossa' I was unable to find any pollen or an intact pistil. This reconfirms what has been previously reported by Dr. William Ackerman and Dr. Clifford Parks.

On a final note it is interesting that Tom Nuccio told me that late in the season 'Nuccio's Bella Rossa' occasionally puts out a rose form double flower. On one occasion they even collected seeds. Tom described the resulting flowers as "the ugliest singles he ever saw". This is really something coming from a man whom his cousin Jude Nuccio says "never met a single flower he didn't like".

4 ROSE FORM DOUBLE FLOWERS

The layers of petals overlap and appear as a rose bud in the early stage of flower development, and then the flower opens to an open bud showing stamens in a concave center. This is illustrated by 'Cherries Jubilee' and 'Glen 40'. 'Shishigashira' is usually a semidouble but has occasional rosebud flowers. In this form the conversion of stamens to petals is almost complete. A small cluster of stamens near the center of the flower is all that remains of the bloom's ability to produce pollen. When present, it may be used as a pollen parent. I have successfully used 'Glen 40' pollen to produce seedlings. 'Shishigashira' is reported as the seed parent of other camellias such as 'Yume' and 'Showa-no-sakae.' In southern California 'Shishigashira' generally has semidouble flowers with an occasional rosebud bloom. Therefore, it is best to consider it a semidouble flower.



'Glen 40'



'Tiffany'



5 PEONY FLOWERS

The peony form has a deep, rounded flower with two sub-types. The loose peony form has loose petals which may be irregular with intermingled stamens. Sometimes the center has intermingled petals, petaloids and stamens. This form is illustrated by the small bloom of 'Maroon and Gold' and the large flower of 'Tiffany'. The full peony form has a convex mass of mixed, irregular petals, petaloids and stamens or irregular petals and petaloids that never show stamens. 'Debutante' and 'Margaret Davis' are examples.

In the peony form, the petaloids have further evolved and more closely resemble petals. The loose peony form in some instances is still fertile, but the full peony form is most likely sterile. I have never seen seeds set on my full peony flowers and have not found viable pollen to harvest. For example, I harvested at least 30 'Margaret Davis' flowers these last two years and have never found usable pollen. I have harvested viable pollen from 'Maroon and Gold', which has produced seedlings as a pollen parent but not as a seed parent. 'Kramer's Supreme' has a loose peony flower that occasionally sets seeds. In short, it is possible to use the loose peony form flower as a pollen or seed parent, but it has low fertility. The advantage is the higher likelihood of producing complex flower forms even though the level of fertility is significantly lower than with the single and semidouble flower forms.



'Elegans Champagne'

OTHER WAYS TO CLASSIFY FLOWERS

In addition to the six major flower forms, there are cultivars with flower shapes described as tubular or cup-shaped. However, there are not enough of them to merit separate categories. The added description does help identify them and distinguish them from other singles or semidoubles.

TUBULAR-SHAPED BLOOMS

Three examples are 'Red Hots', 'Red Tulip' and 'Tama Peacock'. 'Tama Peacock' is described as a tubular semidouble flower that is small to medium with a "maroonish red, washing to a white border".

CUP-SHAPED BLOOMS

A number of the yellow camellia species have small, single cupped-shaped flowers. *C. nitidissima* and *C. tungghinensis* have flowers that are good illustrations of this flower form.

The form and shape of flowers is an inherited trait so breeders should consider this in hybridizing. That is, if both parents have tubular-shaped flowers the probability of seedlings producing tubular shaped forms is high. The probability decreases when only one parent is tubular-shaped. A tubular flower may occur on a seedling whose parents are not tubular, but this is a low probability.

PETAL CHARACTERISTICS

In addition to the usual flower classification, there are blooms that have variations in their petals that add to the clarity of their descriptions. Some flowers will have wavy petals. For example 'Silver Waves' and 'San Dimas' are large semidouble blooms with wavy petals. There are camellias with incurved petals. This petal characteristic is illustrated by 'Joe Nuccio'; and 'Kramer's Fluted Coral', as its name indicates, has lovely fluted petals. The large, red peony form *C. japonica* 'Clark Hubbs' has fimbriated petals (serrated petals). The sport of 'C.M. Wilson' named 'Hawaii' also has fimbriated petals. There are camellias with flowers with ruffled petals such as 'Hilda Jamieson'. 'Holly Bright' has bright red flowers with creped petals and holly-like foliage. In addition there are flowers that have "waxy" or textured petals as illustrated by *C. nitidissima*.

6 ANEMONE FLOWERS

The Elegans family is the best illustration of the anemone form bloom. This form has one or more rows of guard petals which may be flat or undulating. The center is a mass of convex intermingled petaloids and stamens that look like a sea anemone, hence the name. 'Elegans Champagne' aptly shows the form. A second example of the anemone form is 'Rudolph Variegated'.

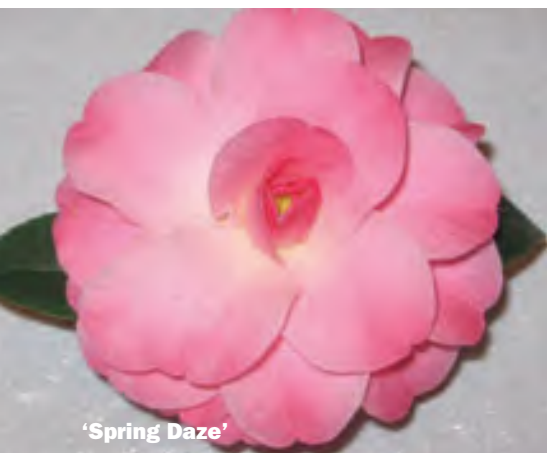
The anemone form has a greater loss of functional stamens because a larger number change into petaloids (a halfway stage between stamens and petals). As long as there is pollen to harvest, it can be used in hybridizing. My 'Rudolph Variegated' is pollinated by bees and sets seeds. However, I find it difficult to emasculate the bloom and to find the pistil without damaging it — the bees are more successful than I am. But when an anemone form is used, the likelihood of producing seedlings with more complex flower forms has greater potential than with singles and semidoubles.

MULTIPLE FLOWER FORMS

Many camellias have two or more recognized flower forms. 'Shishigashira', as noted earlier, has both rose form double and semidouble flowers. 'Glen 40' has a formal double and a rose form double form. The rose form double has pollen while the formal double is completely sterile but is the form greatly preferred as a show entry. The popular *C. reticulata* 'Frank Houser' has semidouble to peony flowers.

Flower forms are influenced by soil and weather conditions. For example, 'Spring Daze' is frequently a formal double in Bakersfield, California, but a rose form double in the Los Angeles area.

Camellia flower forms range from simple (single form) to complex (formal double) with fertility also on a continuum. Breeders increase the probability of developing more complex blooms when using pollen or seed parents from more complex flowers. However, fertility is lower as flowers become more complex, culminating with sterility in the formal double form.



FLOWER SIZE

The flower forms, when combined with color and size, provide a valid and complete description of a camellia bloom. The standard measurement for a miniature flower is 2½ inches or less; small is over 2½ to 3 inches; medium over 3 to 4 inches; large over 4 to 5 inches; and very large over 5 inches.

FLOWER COLOR

The *Camellia Nomenclature* uses the color descriptions from the originator, publications, other reliable sources and the best judgment of the research committee. However, allowances need to be made for variations in color due to locality, type of soil and weather conditions. In addition,

color descriptions are open to wide differences of opinion.

In the scientific world, color theory has been around for centuries. However, the practical application of theory used in color dictionaries is a very slippery slope. The purpose of a color dictionary is to assign a unique label to a color. There are dozens of color dictionaries with no two using the identical terms or color tones. One of the best early ones is Ridgway's *Color Standards* and *Color Nomenclature*, first published in 1912 with 1150 developed shades of colors. He used very colorful language — deep turtle green, deep fluoride green, malachite green, shamrock green, light Danube green, deep dull green. Mrs. Ridgway cut all the color swatches by hand and

pasted them into his books with the text descriptions. This system is still used by scientists, naturalists and stamp collectors to identify specific color shades as part of identification.

We see Ridgway's influence in some of the camellia color descriptions in the *Camellia Nomenclature*. For example, 'Kramer's Supreme' is described as "turkey red" and 'Shot Silk' as "brilliant spinel pink." Sir Isaac Newton created a color wheel in 1704 that allowed people to see colors in relation to each other rather than as straight line. Color wheels are important because they show the relationship and proximity of one color to another across the spectrum. Historically, however, color dictionaries and color wheels have not been used in listing new camellias for the *Camellia Nomenclature* or in registering new cultivars through the American Camellia Society. They are not used as standard practice at camellia shows. Over the twenty-six editions of the *Camellia Nomenclature* no standard color names have ever been adopted, leaving us having to use the less-than-perfect color descriptions of the hundreds of originators and our best judgment. The use of photographs in books, images on email and on web sites like the American Camellia Society's www.americancamellias.org help the hobbyist learn the expected color tones of camellia flowers.

AND WHY DO WE DO ALL THIS?

The *Camellia Nomenclature* classification system is used to describe the characteristics of flowers in terms of flower form, color and size for the camellia hobbyist in English-speaking countries, especially the U.S. The purpose is to decrease confusion and provide standards to avoid or settle controversies surrounding the names of old and new cultivars.

The use of pictures in this article is intended to be an added benefit in appreciating the variety of camellia flower forms and in identifying and distinguishing among flowers that the hobbyist may encounter at shows, nurseries and public gardens on the American Camellia Trail. ■



BRADFORD KING

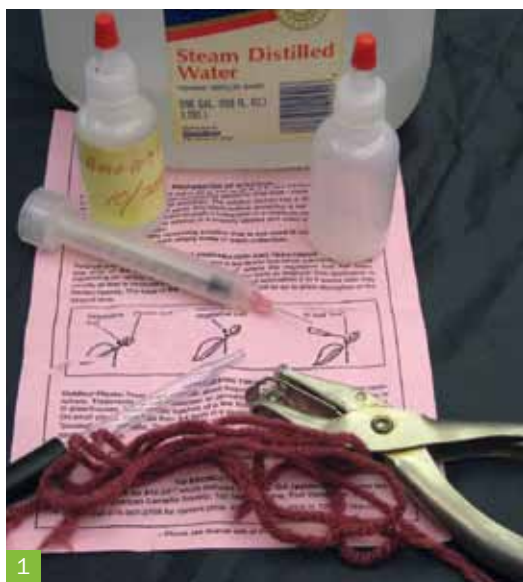
Spotlight: *Camellia x williamsii* 'Island Sunset', non-reticulata hybrid.

Many *Camellia* hybrids are crosses between *C. saluenensis* and *C. japonica*. The colors are lovely soft tones, and leaves are a neat green. Growth of the plants is typically bushy upright — good candidates for shaded landscape situations where they produce a mass of flowers year after year. These hybrid camellias historically account for five percent of new camellia introductions, and are the third most popular camellia behind selections of *C. japonica* and *C. reticulata*. The first was produced by J. C. Williams in England in the 1930s and as a group they are known as the Williamsii Hybrids. They, and other inter-specific *Camellia* hybrids, represent the future of camellias: some are fragrant, others

are yellow, and a number are cold-hardy. Many grow fast having inherited hybrid vigor.

Camellia x williamsii 'Island Sunset', an outstanding non-reticulata hybrid, was introduced by Nuccio's Nurseries in 2002. The flower has a rich coral pink bloom toned lighter in the center. Medium-to-large, it is a semidouble blooming mid-to-late season, a good camellia to extend the flowering season. It is a show winner as a single bloom entry, as well as in trays of three, five or more identical blooms. It is outstanding when treated with gibberellic acid, which influences it to bloom early, increases size and color intensity — for a striking contrast between the outer coral pink petals and the center pink. —**BRADFORD KING**

• CAMELLIA KNOW-HOW



Giving Them the Needle

Flowers that are bigger and earlier--thanks to a shot of gib

STORY AND PHOTOGRAPHS BY BRADFORD KING

Adolescent men, some old enough to know better, like to needle others to see what results they get. Many women, and a few men, are adroit at using needle and thread to make beautiful clothing. Camellia people also like to give camellias the needle to see what results they get and to make beautiful flowers. How did this come to be? And why do it?

Give your thanks to gibberellin. Its powers were discovered when scientists in Asia began investigating causes for rice crop failure nearly a century ago. In 1926 Eiichi Kurosawa, a plant pathologist in Taiwan, learned that filtrates from cultures in which the fungus *Gibberella fujikurui* had been grown contained material which, when applied to plants, increased their height and other growth responses. In 1935, Teijiro Yabuta isolated the active crystalline substance which he called "gibberellin". However, it was not until 1938 that Sumiki isolated gibberellin in his laboratory at the University of Tokyo. We now know the following about it:

Gibberellin promotes and increases cell elongation in both vegetative and flower growth and results in individual cells becoming larger than normal.

Application of gibberellins increases cell

division resulting in more, larger cells.

Cell plasticity is increased, allowing the interior cell wall to stretch.

Gibberellin treatment increases parthenocarpic fruit — the ability of some plants to develop fruit and seed without flower pollination.

Genetic dwarfism is reversed with the additions of gibberellins.

Gibberellins affect flowering cycles. Specifically, gibberellic acid applied to camellias in the fall will produce blooms in 30 to 60 days on plants that usually take three months or more.

Gibberellins are formed in the new foliage, shoots, root tips and in germinating seed embryos.

Gibberellic acid is transported in xylem (upward) and phloem (downward) but in very short distances from the site of synthesis.

Gibberellins can be leached from leaves by rain or overhead watering.

The production of gibberellins is under genetic control.

GIBBING CAMELLIAS

In the United States after World War II, it was found that spraying a solution of gibberellic acid on young grape clusters

in spring increased the size of fruit and elongated the stems, making for an earlier and easier harvest.

Col. Frank Reed of Pasadena, California, popularized the present method of gibberellic acid application on camellias. In the 1960s he reported extensively on his procedure of breaking off the vegetative growth bud at the base of the flower bud and filling the resulting cup with a solution containing gibberellic acid. This was a fast and direct method of delivering a substantial amount of gib into the vascular system at the point where it was most effective.

Camellia hobbyists became enthralled with camellia blooms treated with gibberellic acid because they were 10 to 50 percent larger and bloomed 6 to 10 weeks earlier. The increased size became a problem at camellia shows, and show rules were revised to have two classes — treated and untreated flowers. As gibbing became more widespread, many shows became "open", having one class for treated or untreated.

In the southern and eastern states where cold weather may ruin or inhibit blooming, gibberellic acid may be used to get earlier show-quality flowers without a greenhouse. The gibbing of *C. reticulata* buds means that their flowers can be



Above: 1. Gather the equipment needed. 2. Identify the fat flower bud and the slender vegetative bud 3. Without damaging the fat flower bud, carefully twist out the growth bud leaving the cup beneath intact. 4. Label the bud and inject a drop of gib solution into its cup.

entered in camellia shows, even the earliest shows. The late, and very late, gibbed blooms may be enjoyed earlier before the warm weather begins in California, and in the warmest areas in the Southeast.

While the super sizes may be a “wow” factor and thus contribute to interest in camellias, novices will need to be reminded that they will not get such results without good culture as well.

The time for administering gibberellic acid is 30 to 90 days before the flowers are desired. This is due to the number of variables that contribute to the blooming time of a plant and include: the cultivar’s genetically determined bloom season, the condition of the plant, the size of the bud, and local weather conditions. Cold and dry weather retard gibbing reactions, while warmth and humidity speed up the process and generally produce better results. In Southern California the first camellia show is the second weekend after New Year, so gibbing is begun around Thanksgiving. If you want flowers to display for the holiday season, gibbing would begin a month or so earlier. In many southern states application of gibberellic acid may begin in the middle of August and continue weekly.

HOW TO USE GIBBERELIC ACID

The ACS Gift Shop sells gibberellic acid in a one-gram package at a reasonable price; you may order by telephone, mail or online. The dry powder is mixed according to the directions provided, in 2 to 3 ounces of distilled water and a few drops or more of non-foaming ammonia, which brings it into solution. The mix is kept refrigerated to prolong its life. Some people keep the solution, but I use it for one camellia season and order a new supply each year.

The one-gram mix will treat hundreds of buds. It may be applied with the “eye dropper” included in the purchase price, but an inexpensive injection-type needle works best to deposit one drop of fluid in the cup created by removing the leaf bud. The flower bud is held firmly without damaging it, while the leaf bud is removed with forefinger and thumb nail. Gibbing is not done when the flower is wet due to sprinklers or rain and optimally not when rain is expected. The solution will be absorbed in a few hours, eventually turning the growth bud cup dark — a sign that gib has been applied. This is why the camellia show rules state that a non-treated bloom must retain an intact growth bud.

Fortunately there are very few cheaters in the camellia show world, but anyone can make a mistake by entering a gibbed bloom in an untreated class. The best way to avoid errors is to mark each treated bud; a hole punched in the lower corner of an adjacent leaf, a piece of colored yarn or plastic bag holder all work well.

When picking the treated flower, its name and identity are recorded on the appropriate show card — there are different cards for treated and untreated blooms. When in doubt, turn the flower over to see if there is an intact leaf bud or not. When using a hole punch it is best to punch the hole first so as not to knock the gib out of the cup. Likewise, be careful not to do anything that may cause the liquid gib to be shaken loose.

FLOWERS THAT GIB WELL

Which flowers take gibberellic acid the best? While most camellia flowers react to being gibbed, there are certainly some that are particularly worth “giving the needle

to.” One place to look is on the ACS web site under show reports from your area of the country. It is generally not worth the effort to gib the fall-blooming sun camellias (*C. sasanqua* and *C. vernalis*) as they are grown for their evergreen foliage, profusion of small flowers and use as landscape camellias. Likewise, early-blooming japonicas that have a tendency to have bloomed out prior to the show season are not good candidates.

Many japonicas are worth giving the needle. My favorite small flower to treat is ‘Maroon and Gold’. In Southern California if not gibbed, it blooms into the warm weather of April and May, way beyond local shows. ‘Little Michael’, ‘Fircone’ and ‘Man Size’ are miniature flowers that win as treated flowers. Medium bloomers like ‘Firedance Variegated’, ‘Magnoliaeflora’, ‘Herme’, ‘In the Pink’, ‘Nuccio’s Carousel’, ‘Nuccio’s Pearl’, ‘Glen 40’, ‘Glen 40 Variegated’ and ‘Prima Ballerina’ all take gibbing well. Some large and very large japonicas that look spectacular when treated are frequent winners: ‘Elegans Champagne’, ‘Elegans Splendor’, ‘Grand Prix’, ‘Grand Slam’, ‘Junior Prom’, ‘Lady Laura’, ‘Miss Charleston Variegated’, ‘Royal Velvet’, ‘Royal Velvet Variegated’, ‘Show Time’, ‘Tiffany’ and ‘Tomorrow Park Hill’.

Most of the *C. reticulata* hybrids are terrific when treated. You will regularly see the following show winners: ‘Curtain Call’, ‘Emma Gaeta Variegated’, ‘Frank Houser’, ‘Frank Houser Variegated’, ‘Harold L. Page’, ‘John Hunt’, ‘Larry Piet’, ‘LASCA Beauty’, ‘Miss Tulare’, ‘Valentine Day’ and ‘W. C. Gilley Variegated’. The non-reticulata hybrids also respond very well to being gibbed, such as ‘Buttons ‘n Bows’, ‘Nicky Crisp’, ‘Hot Stuff’, ‘Joe Nuccio’, ‘Julia’, ‘Island Sunset’, ‘Spring Daze’ and ‘Waltz Time Variegated’.

REMINDER

The use of gibberellic acid is to increase the size of camellia flowers and bring flowers into bloom a month or two ahead of their scheduled time to flower. It doesn’t hurt the plant and increases the grower’s pleasure to decorate one’s home or enter blooms in a camellia show. If you have never tried it, this is the season to do so. ■

YELLOWER HYBRIDS



This Nuccio's Nurseries display at Descanso Gardens features 'Senritsu-ko', *Camellia nitidissima*, and 'Ki-no-senritsu'. Below right is lovely 'Gwenneth Morey'

The promising news about new cultivars from the U.S. and Japan

STORY AND PHOTOGRAPHS BY BRADFORD KING

THE ROAD TO DEVELOPING yellow camellias has been long and rocky. There are many pale yellow hybrids, a few light yellow camellias available and two lovely yellows in the pipeline. We wait patiently for new hybrids.

But now there's new hope and opportunity as hybridizers use species like *Camellia flava* to develop yellow camellias, as reported in ACS Journal of summer 2007 — remember that striking yellow cover flower? However, other cultivars available also offer growers the opportunity to add beautiful yellow-toned flowers to their gardens. My garden is graced with five yellow



A perfectly matched set of creamy 'Honeymoon' camellias beautifully decorate this tray of five.



The yellow in camellias has been getting deeper, but now there's a rush for real Gold!

cultivars which add to the diversity of my show-flower entries. They grow in deeper shade where other camellias may fail to bloom — a major advantage in maximizing limited garden space.

There are more than 40 yellow *Camellia* species growing in China and Vietnam that have been identified. Those generally available are *C. flava*, *C. chrysanthoides*, *C. nitidissima* variety *nitidissima*, *C. nitidissima* variety *microcarpa*, and *C. tungthinensis*. The best known of these species is *C. nitidissima* variety *nitidissima*, formerly *C. chrysantha* but generally known as *C. nitidissima*. This camellia has been used to develop new yellow hybrids because the small, cup-shaped flower is a lovely deep shade of golden yellow. However, the progress in developing yellow hybrids has been very slow with most controlled crosses failing, especially those with *C. japonica* parents. Sometimes there are seed pods, yet the seeds themselves are hollow. The few seedlings that germinate usually inherit little or no yellow. The very small percentage that

do show cream or pale yellow color are almost always sterile and are thus useless in producing other crosses to enrich the yellow. While there have been more successful crossings with *C. reticulata*, it is rare to find creamy or pale yellow seedlings. That is the bad news. Fortunately, there's some good news.

The early successes of 'Witman Yellow' in 1963, 'Gwenneth Morey' in 1965 and 'Brushfield's Yellow' in 1968, have whetted the appetite for a yellow camellia. 'Witman Yellow' is a medium, semi-double white flower tinged with yellow. 'Brushfield's Yellow' has a central cluster of yellow petaloids with white guard petals, making it an attractive, medium-sized bloom. 'Gwenneth Morey' is very similar but not identical. For many years the pale, creamy-to-light yellow of the formal double 'Dahlohnega' was the best yellow-toned camellia. It was introduced in 1986 by Walter Homeyer and named after the town and river in Dahlohnega, Georgia, that

was the site of America's first gold rush. The name is the Native American word for gold. It is a lovely small-to-medium camellia that grows slowly as an upright plant with a nice gray bark. 'Dahlohnega' is a very attractive plant with many flowers that tend to become more yellow as the bloom matures on the bush.

Julius Nuccio, one of the founding brothers of Nuccio's Nurseries, actively sought to develop a yellow camellia using *Camellia nitidissima* as a parent. He was able to propagate five seedlings that have found their way into the camellia world. The nursery introduced 'Lemon Drop', an off-white to pale yellow semidouble in 1981; followed by 'Honeymoon', a creamy white with yellow at the base of the petals in 1992; 'Golden Glow', a creamy white, medium semidouble, with light yellow at the base and a slight pink tone on the edges and back of the petals, in 1994; 'Lemon Twist', a creamy pale yellow flower in 1996, and 'Buttermint', a miniature cluster-blooming, very creamy-to-pale yellow, rose



'Senritsu-ko' has created quite a stir with its light yellow flowers and peach edges. This tray of five is a show winner.

form double in 1997. We see 'Honeymoon', 'Golden Glow' and 'Buttermint' in the camellia shows in southern California. In the 2009 Huntington Gardens Camellia Show, 'Honeymoon' won a well-deserved second place in the highly competitive non-reticulata class. A group of 'Buttermint' plants graces the Huntington's Chinese Garden, where it is paired with a row of red azaleas. This *C. kissi* hybrid makes for a neat, upright landscape plant with clusters of profuse flowers up and down its branches.

JAPANESE HYBRIDIZERS

Mr. Kazuo Yoshikawa of Osaka, Japan, relentlessly pursued the goal of developing a yellow camellia. He used *Camellia* species *C. saluenensis*, *C. reticulata*, *C. japonica* and *C. sasanqua* crosses with *C. nitidissima* variety *nitidissima* in numerous combinations. In the United States four of his yellow hybrids are now available through Nuccio's Nurseries. They are: 'Kinomoto #92', a light yellow, medium single; 'Kinomoto #93', a light yellow

semidouble; 'Kogane-nishiki', a pale yellow with slender stripes of red from its parent 'Betty Foy Sanders'; and 'Kogane-yuri' (Golden Lily), a creamy-white single that blooms profusely up and down its slender stems. While "kogane" means gold in Japanese these cultivars are more like heavy cream or pale yellow in color.

Mr. Tadao Yamaguchi of Ishikawa, Japan, is a pioneer hybridizer of yellow camellias. He introduced 'Shoko' which means "First Yellow" in 1989. This light yellow, small single was followed by three other pale yellow hybrids: 'Kicho', a small tubular single; 'Kiho', a small-to-medium, single tubular with wavy petals; and 'Ki-no-gozen' a cup-shaped, small-to-medium single.

NEW YELLOW HYBRIDS

In 2007 two of the best yellow hybrids were introduced by Nuccio's Nurseries. They are the work of Mr. Tadao Yamaguchi, who back-crossed 'Hakuho' on *C. nitidissima* to get these light yellow

hybrids. 'Ki-no-senritsu' (Yellow Melody), has a lovely peony-to-loose-peony flower that thrives in deep shade where it grows moderately fast, but it is a shy bloomer. 'Senritsu-ko' has a beautiful, small-to-medium, formal-to-rose-form flower with light yellow petals having peach pink edges. It grows moderately fast in an upright open growth pattern. It sets multiple buds and flowers easily in mid-season. In Southern California it has many more rose-form flowers than formal double. It, too, prefers more shade than a typical japonica.

A lovely light yellow camellia not yet available is 'Alice B. DuPont'. Gene Phillips of Savannah, Georgia, back-crossed 'Golden Glow' to *C. nitidissima* to get this small, semidouble flower featured on the cover of *The Camellia Journal* in summer 2008. The deepest yellow camellia to date is called 'Kagirohi', a formal double obtained from crossing 'Silver Chalice' x *C. nitidissima*. It is not readily available commercially and is a reluctant bloomer. ■



Camellia reticulata
'Frank Houser Variegated'

ANN WALTON

Spotlight: *Camellia reticulata* 'Frank Houser' & 'Frank Houser Var.'

In 1989 the well-known camellia hybridizer Walter Homeyer, of Georgia, crossed *Camellia reticulata* 'Buddha' with *C. japonica* 'Steve Blount' to get the outstanding 'Frank Houser', a very large, deep rose-red semi double to peony form flower. It has been said that Walter was not that impressed with his seedling, but his neighbor Frank Houser M.D. was talking over the fence with Walter and was very taken with the bloom. Walter said, "Then I'll name it after you. Do you want Dr. Frank Houser, Frank Houser or what?" They settled on 'Frank Houser'.

Homeyer had introduced the pollen parent 'Steve Blount' in 1974, and it was an unremarkable light red, semi double flower which sets seed well. The 'Frank Houser' flower is magnificent — with more red tone than 'Buddha' and inherited size and form from this *C. reticu-*

lata x pitardii variety *C. yunnanica* from China. The growth habit is vigorous, open, spreading upright with attractive foliage that makes an excellent landscape plant.

The variegated form of 'Frank Houser' also is highly desirable. The beautiful rose red flower with contrasting white blotches is striking and regularly wins shows. In the United States last year 'Frank Houser Variegated' won 205 times in camellia shows. The only flower with more wins was 'Frank Houser', with 261 winning points. Since their introductions, both camellias have almost completely dominated the ACS Camellia Hall of Fame (most Best in Show awards and Court of Honor awards).

The introduction of 'Frank Houser' and its variegated form make this camellia arguably the best and most popular *C. reticulata* of the decade. —BRADFORD KING

How to bonsai a camellia

Creating an original living work of art, step by step

STORY AND PHOTOGRAPHS BY BRADFORD KING



'Egao Corkscrew'
lends itself well to the
demands of bonsai

Jude Nuccio told this story that captures the bonsai mindset. A Japanese neighbor had a wonderful bonsai collection and Jude left him a potted camellia on the patio. Jude watched him quietly enter the patio, sit, view the camellia for twenty minutes and leave. The next day he arrived, rotated the pot, contemplated the plant and left. This was repeated for seven days before he took the camellia home to bonsai it.

The bonsai mindset is the first stage in creating a living work of art. It can be likened to the wine connoisseur considering the selection of fine wines to accompany a five-course gourmet dinner, or to the sports-minded fan preparing for fantasy football draft day, or the mother of the bride selecting her dress for the wedding. It is a time of reflection that integrates thoughts and feelings into a vision. This is not an impulsive act. There may be an “ah” moment — a spontaneous flash of this is the ONE. This feeling is to be enjoyed as part of creating a bonsai.

I begin my own bonsai work by spending a few hours reading camellia books and mulling over my camellia bonsai list. This planning is fun, to read, ponder and select candidates to bonsai.

WHICH CAMELLIAS TO BONSAI?

The traditional choice would be a Higo type *Camellia japonica* Higo group. There are 120 officially recognized by the Kumamoto Higo Camellia Society of Japan; these are not all available in the United States. Procure a good quality plant. Camellia nurseries offer the best opportunities, and many will mail-order plants. Living in Southern California, I use Nuccio's Nurseries; their catalog lists 20 Higos. Your friends in the local camellia society will have scions to share. The modern gardener may stick with the traditional Higo

> continued on page 11



This handsome
bonsai beautifully
showcases Camellia
hybrid 'Nicky Crisp'.
It is easy to see why
this camellia is a fa-
vorite bonsai subject.

11 steps to bonsai success

A bonsai is a “tree in a pot.” Developing a bonsai boils down simply to getting a normally large tree or, at least, shrub to grow in a small pot. Here I will break it down into 11 steps:

1 The camellia is carefully removed from the container so as not to damage the roots and potted down one size: e.g., from a 3-gallon to a 2-gallon pot. Some of the roots may be trimmed in order to make them fit comfortably.

2 Prune the camellia into an approximation of your bonsai mental image.

3 Wire the camellia into the desired shape with bonsai wire (soft, easy-to-bend copper), which can be purchased from specialized nurseries, garden shops or members of the local bonsai society.

4 Allow the potted, pruned, and wired camellia to acclimate for at least six months (a year is optimal). Patience, patience, patience is the mantra. This plant is treated as you would any other potted camellia — i.e., placed in the shade and kept moist, not wet. ‘Egao Corkscrew’ and ‘Shibori Egao Corkscrew’ can be grown in light sun.

5 Shop for bonsai pots in the correct shape, color and size for your resting plant. In general, round and oval shapes are used for flowering plants and rectangle for non-flowering. I use rectangle pots for foliage camellias like ‘Egao Corkscrew’ and ‘Taiyo’, even though blooms are expected. I selected a Chinese blue hexagonal shaped (visually round) for ‘Nicky Crisp’. This is a matter of aesthetic taste and personal preference. I choose pots in the \$10 to \$40 range, but hundreds to thousands of dollars can be paid for a high-end bonsai pot. In general a 1-gallon container camellia will fit a 4-by-8-inch rectangle pot and a 3-gallon in a 6-by-10 or 12-inch rectangle pot; a 5-gallon in an oval shape 18-by-8 or a round 12 to 18-inch diameter. The choice is up to you but not too small or too large. Remember: the plant will have the same size leaves and flowers as in the ground.

6 Prepare the camellia mix for your bonsai. This mix needs to be loose to drain well, slightly acid and high in humus. It is simplest to use a high-quality camellia



A



B



C



D



E

A. Assemble the tools you will need.
B. Carefully remove the camellia from its pot.

C. Spray and wash soil from roots and prune them by one third.

D. Spread the roots within the bonsai pot.

E. Use copper wire to train bonsai

mix from your local nursery.

7 Prepare the pot by cutting wire screening and place over the drain holes.

8 Carefully remove the camellia from its container by turning it on to its side and tapping the sides of the pot until the root ball is loose.

9 Wash all the soil from the root ball, being careful not to damage roots. I spray the root ball with a gentle spray and wash off the soil in a large bucket of water.

10 With garden shears, prune the roots by a third. Remove any dead or damaged roots. If the root ball is small or not fully developed, reduce the root pruning accordingly.

11 Place your camellia in the bonsai pot in the most appealing spot possible. This may mean dead center—e.g., a zigzag ‘Egao Corkscrew’. With others, slightly off-center may be preferable. Roots should be carefully spread throughout the pot. If possible, one or two large roots and a few small roots are left exposed — this gives the perspective of old age. Personally I make no attempt to follow formal bonsai rules. The fun for me is in the creating. On the other hand, when I bonsai a Higo camellia, I follow the traditional guideline, seeking a plant that is 2 feet high and wide — this best shows the trunk, leaves and blooms.

or break out and use camellia species, japonicas, reticulatas and hybrids. It's your choice — have fun and create.

How do I choose? After making a list, I visit the nursery to look at specific plants. I choose only the individual camellia that “speaks” to me. This is a plant that has the potential to be shaped by pruning and wiring into a natural informal-style bonsai. This frequently means passing up on camellias at the top of the list. For example, a large upright, heavily branching camellia that would be an outstanding landscape plant or show flower camellia is not, in my opinion, good for bonsai. On the other hand, a crooked, slanting or sparse yet healthy camellia may be the one that speaks to you. The plant needs to be interesting, different or whimsical.

What do I recommend? My favorite Higo is ‘Ohkan’ (right), a sport of ‘Yamato Nishiki’, a white, irregular-shaped medium single bloom, with a lovely bright crimson border topped with many flared yellow stamens. The slow, compact growth with dark green foliage makes a splendid bonsai.

There are a number of camellias with striking leaf patterns or interesting growth habits that make wonderful bonsai. My favorite foliage camellias are ‘Egao Corkscrew’, ‘Shibori Egao Corkscrew’, ‘Taiyo’ and ‘Ginyo-tsubaki’.

‘Egao Corkscrew’ is a sport from the great ‘Egao’. It has a natural, distinctive zigzag growth habit that lends itself to bonsai. The bloom is semi double to loose peony in form, a beautiful pink medium flower with highly ruffled petals. The growth habit is average and spreading. It may be grown in sun or partial shade. ‘Shibori Egao Corkscrew’ is the variegated form with a distinctive zigzag growth and green leaves blotched with yellow. This makes for a very attractive foliage bonsai with a pink flower with white markings. ‘Ginyo Tsubaki’ is a very strong, very slow upright-growing shrub. The small red, tubular single flower is unremarkable, but the small light gray green leaves have dark green, heavily serrated edges, making for a very unusual and distinctive bonsai. Even experienced camellia growers ask, “What is it?” ‘Taiyo’ has wonderful foliage, a rich green with an irregular yellow pattern in the leaf's center and a single, coral-rose flower.

A third approach in choosing is to bonsai one of your personal favorites. For example, I think ‘Nicky Crisp’ is one of the best hybrids. I love the fresh clean, light orchid pink flower. The bloom is a medium, semi double that flowers mid-to-late season and the slow compact growth works well for bonsai.



Your new bonsai is going to need special care — no getting around that.

Placement: A camellia is an outdoor shade plant. It will thrive in a northern or eastern exposure under a tree or in a shady area protected from full sun. As noted earlier, ‘Egao Corkscrew’ and ‘Shibori Egao Corkscrew’ will take more sun.

When a bonsai is in bloom, it may be taken indoors for one or two days in a cool area away from hot or cold heating vents. I prefer to move my plants to the patio where they are easily viewed but are still outside.

Watering: Bonsai camellias should be kept moist and not allowed to dry out. This may mean watering every day in the summer depending on local conditions. Pour water on the soil to the top of the pot and allow the water to soak in. Repeat three or four times until the water flows freely from the bottom of the pot. Do not wet leaves

during the heat of the day. On a hot summer day provide a late afternoon misting in addition to regular watering.

Fertilizing: Never feed a dry camellia! Feed every other week with a liquid fertilizer from the middle of March until the end of August with a product like Miracle-Gro for azaleas and camellias (30-10-10) at one third strength. During the months from September to March use a low nitrogen fertilizer, i.e., with nitrogen of 3 or less, such as Shultz (5-10-5) at half strength. Less is better than more with fertilizers.

Pruning: Ongoing shaping of a bonsai should continue for as long as necessary to maintain or improve the desired look. Prune bonsai plants in the spring after the growth flush. Prune to the leaf growth bud pointing in the direction you wish for new growth to push out.

Wiring: Wires can be removed after six months to a year. If needed, new

wires may be added to improve the shape of the bonsai.

Repotting: Repot every two years but never go longer than three years. The cool days of February, before new growth begins, are optimal for repotting. Gently pull the camellia out of the pot and trim off 20% of the larger roots. Fill the empty space with a high-quality camellia/azalea mix. Keep the repotted bonsai in a protected area out of wind and sun for a week.

Vacation Care: When away from home for any length of time, provide care for your bonsai by leaving it with a friend. Another option is to place the bonsai in a heavily shaded area that will receive ample water from an automatic water system. Set it for every two to three days depending on the time of the year and local conditions.

Enjoyment: Appreciate your camellia bonsai year-round!

'Nuccio's Jewel'

GEMS &

◆ The jewelry of the camellia world rivals anything
around a movie star's



STORY AND PHOTOGRAPHS BY BRADFORD KING

Hollywood stars wear million dollar jewelry to events like the Academy Awards. The Super Bowl winning football players are awarded a large ring encrusted with gems. The diamond engagement ring and the simple but beautiful gold wedding ring are sacred symbols of commitment and marriage. In the camellia world we have flowers that can rival any gem stone – and a number of them bear the names of gems and jewels because they are cherished for their beauty. This is the story of some of them. ♦ Since 1935 Nuccio's Nurseries has introduced more than 200 new camellia cultivars. Only ten have been given the Nuccio family name, and five of them carry the name of gem or jewel. They have all won acclaim throughout the camellia world because of their beauty. ♦ First we have 'Nuccio's Cameo', the coral pink medium to large formal double flower that rivals the picturesque cameos that my grandmother, mother and women of their generation wore as pins. ♦ Next, alphabetically, is 'Nuccio's Gem', one of the most beautifully petaled, white formal double camellias in the world. Paul Jones, the well known camellia painter, thought that the flower exemplified perfection. ♦ 'Nuccio's Jewel' is a lovely peony form white



'Tama Americana'

JEWELS

neck or on a football player's finger ♦

'Tama Peacock'



◆ The wonderful thing about camellias is that, with the exception of blue, they can give us each our favorite color flowers.

flower that shades to a delicate coral pink on the petal edges. It is at its best in my garden when gibbed, which makes the colors more intense and ensures that it flowers before the heat of spring in Southern California.

The outstanding 'Nuccio's Pearl' (a medium formal double with pointed petals) is a prolific midseason-to-late bloomer, with a blush white flower with deeper pink-toned petals. It grows vigorously and makes an excellent landscape camellia with a show-winning flower.

The only *Camellia reticulata* on my list is 'Nuccio's Ruby'. It is a very dark, rich red, large to very large semi double flower with ruffled petals — as striking as any ruby jewelry you will ever see. Dark reds, such as maroon and ruby, are my personal favorite color tones. The wonderful thing about camellias is that, with the exception of blue, they can give us each our favorite color flowers.

The Japanese also have given us camellia gems. 'Tama-no-ura' is a lovely small single flower with six red petals with a white border ("tama" means "bejeweled" in English). It is the parent of more than a dozen picotee camellias that are as lovely as any set of store-bought jewels. My two favorite Tama jewels are 'Tama Americana' and 'Tama Peacock'.

'Autumn Jewel' is a *saluenensis* seedling with a long blooming season. Introduced by Nuccio's in 2000, the medium formal

double salmon pink flower is not a well known jewel — is it the rose quartz of gem stones? Rose quartz is an attractive gem used in jewelry but not in the same league as diamonds, rubies and emeralds.

Another hidden gem in the camellia world needs to be better known. 'Scented Gem' was introduced by Nuccio's in 1983. It was a seedling given to them by Toichi Domoto, one of the pioneer camellia breeders. It has a miniature flower with the sweet fragrance of its seed parent *C. lutchuensis* and the anemone form flower of its *japonica* pollen parent 'Tinsie'. The flower is rose pink with central white petaloids. Leaves are neat and small, on a strong upright plant. I saw 'Scented Gem' in bloom at the Nuccio's display table at a Descanso Gardens camellia show. It was in bloom with a dozen well-formed, tiny flowers that attracted an audience. I consider it a little cutie with a lovely scent that deserves more attention.

Diamonds may be a "girl's best friend" but they are mined under heavy guard. The British exhibit the Crown Jewels in the Tower of London to protect them from theft. However, we can exhibit our camellia gems and jewels for all to see at a flower show or take a leisurely walk in the garden to enjoy beautiful flowering jewelry in a peaceful natural setting.

'Nuccio's Pearl'





BRADFORD KING

Spotlight: *Camellia japonica* 'Herme'

This is a classic—a very lovely, medium-sized, informal double with pink petals and irregular white border streaked with darker pink. It is even occasionally mildly fragrant.

Now grown throughout the world, it originated in Japan in 1859, where it is called 'Hikarugenji' or "brilliant genji". The name comes from the romantic hero in the Japanese story *Tale of Genj*, a prince known for his elegant style.

The variety came to Sacramento, California, in 1875, then made its way to Germany in 1893 as 'Herme'. The

French called it 'Souvenir d' Henri Guichard'. Some people in the United States call it 'Jordon's Pride'. The priority name should be 'Hikarugenji' but since the name 'Herme' has been used extensively since the 1800s, the *Camellia Nomenclature* has adopted this as the acceptable name in the United States.

Regardless of which name is used, this is a great camellia—popular as a traditional landscape camellia in the home garden and a show winner in trays of like blooms or in the "old timers" class. It is a magnificent showy bloom when it is gibbed. —Bradford King

Propagating Camellias by Cuttings

An easy and inexpensive way to multiply favorite plants

**STORY AND PHOTOGRAPHS
BY BRADFORD KING**



The camellia enthusiast who desires multiple camellias of the same variety has three options. The first and most reliable is to purchase them from a local nursery—just pick them out and write the check. The second option is to get scions from other camellia growers and graft them on to suitable rootstock, e.g., a pencil-size ‘Kanjiro’; you can also graft on to a landscape camellia after you have carefully cut it back. Grafting offers opportunities to get camellias not readily available from nurseries, and your grafted camellia should bloom in a few years. The third possibility is to take cuttings from the varieties you want.

Propagating by cuttings works well for most camellia. It is easy and inexpensive but requires the longest time to produce

flowers. It is fun, though! There are a number of ways to proceed with cuttings some of which require special equipment such as bottom heating, misters, trays and greenhouses. But what I do you can do too!

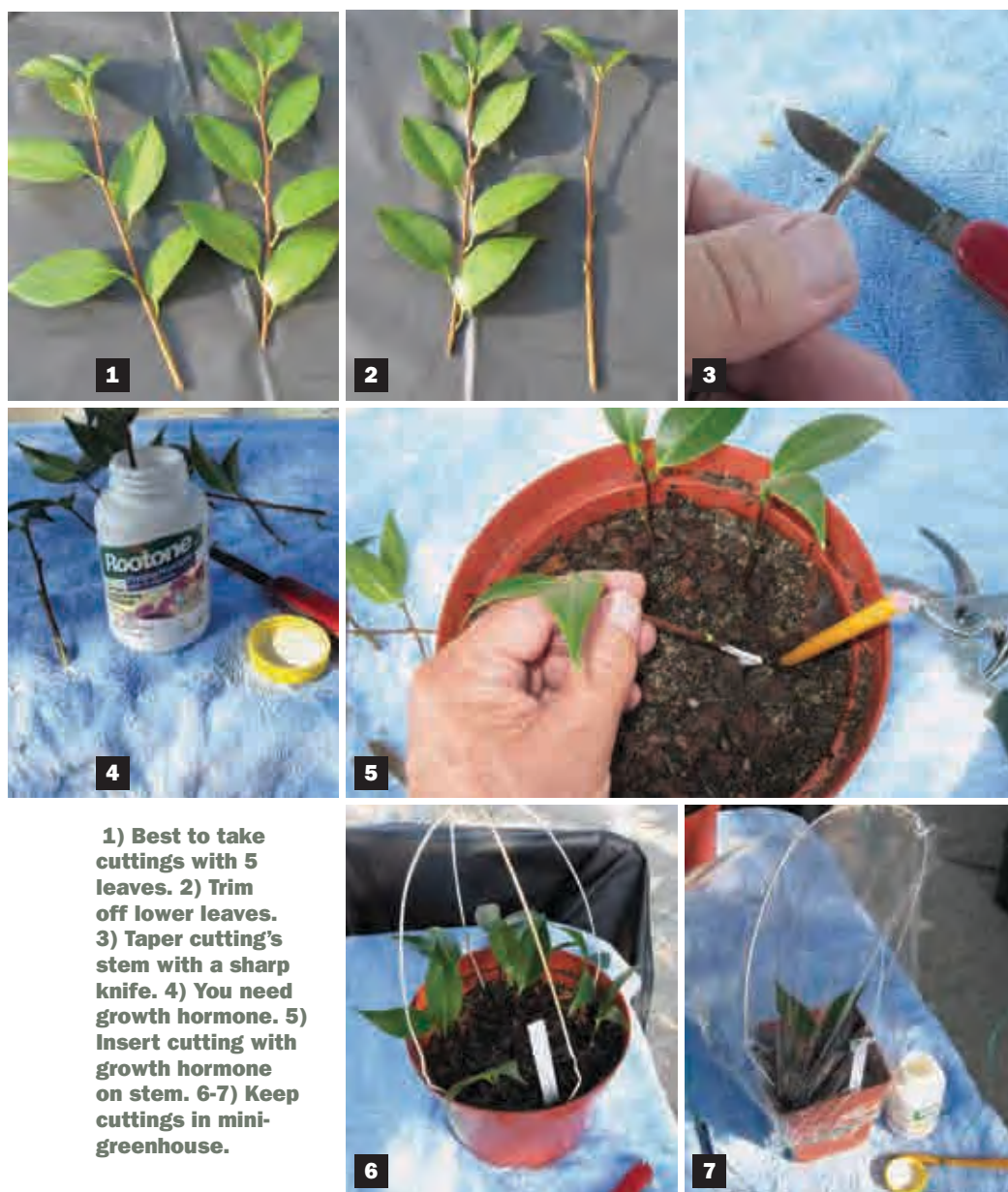
TAKING THE CUTTINGS

The best cuttings come from the current year’s growth flush that has matured. New growth is green, soft and immature. What you want for harvesting is the new growth that has turned light brown, usually by summer. Make cuttings from terminal branches that have five to six leaves. Store the cuttings for up to several months in a closed zip-lock clear plastic bag in the vegetable section of the refrigerator to be used when you choose. I prefer to use them in a few days after harvesting.

STARTING THE CUTTINGS

Prepare the cuttings’ planting mixture, which can be placed in a black nursery-style pot. This mix must be light and loose in texture, specifically 50 percent sand or perlite and 50 percent peat moss, pine bark or potting soil. The mix needs to be watered until it is moist but not soggy.

Next, remove all but the top two leaves of each cutting. If these leaves are small, leave them alone; if large, cut them in half. This is done to reduce the loss of moisture through the foliage. Also cut the stem and remove a thin slice of bark about an inch long, exposing the cambium layer (the thin green layer just below the bark). This will make it easier for the cutting to absorb the hormone powder and will assist in the creation of a callus from which the roots



1) Best to take cuttings with 5 leaves. 2) Trim off lower leaves. 3) Taper cutting's stem with a sharp knife. 4) You need growth hormone. 5) Insert cutting with growth hormone on stem. 6-7) Keep cuttings in mini-greenhouse.

will form. Dip the stem into a rooting compound, such as Rootone. Use a pencil to make a hole for the cutting in the planting mixture; this helps keep the rooting compound on the cutting. Gently fill and pack the hole with the mixture around the cutting to ensure that the cutting is upright. Space the cuttings every 3 to 4 inches apart. Place a plastic label with the camellia variety name in the pot. It is best to have only one variety in each container in order to avoid confusion.

BUILDING A MINI-GREEN HOUSE

Building a mini-greenhouse from household materials is the next step. Two coat hangers bent into arches will easily support a clear plastic cover; equivalent wire can be purchased on rolls at the hardware

store and cut into appropriate lengths. A one-gallon-sized pot with two trimmed coat hangers or 30-inch wire bent in an arc and a bread bag, works very well as a mini-greenhouse. Clear plastic "food and bread bags" cost \$3 for 75 and can be purchased at a local food store. Larger containers will require larger plastic bags. I use the clear plastic bags from the laundry with the tops tied and trimmed, which will easily cover containers up to 10 gallons. Secure the plastic bag with a wire tie that encircles the pot, thereby keeping the bag in place over the wire structure. In the past I have used rubber bands, which secure the plastic very well but break down and disintegrate in a few months outdoors.

Place the mini-greenhouse container with cuttings in a protected shady area of

the garden. If the area is too sunny, cover the container with 50 per cent shade cloth. A properly sealed container will not need additional water. Moisture forms on the plastic and is recycled and not lost. Check the cuttings every month. Add water if needed. As long as the cuttings remain green, they are fine.

AFTER THE CUTTINGS ROOT

The cuttings can root in three months to a year or more, depending on the camellia variety and local growing conditions. Patience is as important as a green thumb. When new leaves begin to form, the cutting is most likely rooted. A gentle pull on the cutting should resist it being moved as the roots are holding the cutting firmly in place. As long as there is room for the cuttings to grow, leave them in the greenhouse. When this happens, I cut a slit in the plastic and gradually, over two to three weeks, increase the size of the holes to acclimate the cuttings to life outside the greenhouse. When the cuttings look dry or the weather is hot and dry, mist them with a spray bottle.

When there is insufficient space for the cuttings to grow in the mini-greenhouse, they need transplanting. Not all cuttings will root at the same time; thus, those not rooted should be left in the rooting container. Transplant rooted cuttings into a new greenhouse, which can be constructed as previously described. Allow these cuttings to grow for a month or two to adjust to being transplanted before acclimating them to life outside the greenhouse.

I strongly recommend using a mini-greenhouse because plants will grow well there with benign neglect. If you go on vacation, take business trips, are busy with work and family, and garden only on weekends, there is a lot that can go astray that the mini-greenhouse can help correct. As long as the greenhouse is properly placed in the shade, it needs no water or extra care. Additionally if the sun position changes or there is too much sun or cold as the seasons change, the greenhouse can be moved or protected with shade cloth.

Why bother with all of this? I enjoy the challenge of learning and doing; providing camellias for friends and society fundraising events; growing rootstock for grafting and simply because gardening is fun, relaxing and a great way to reduce stress. ■

STARS OF THE SUN

Sun camellias that grow and bloom
where and when others don't

There are many camellias that will thrive in direct sunlight. Generally these are selections of *Camellia sasanqua*, which is recognized as a true camellia species when in its purest form. Some taxonomists also give *C. hiemalis* the status of being a species. Most agree that *C. vernalis* is not a separate species but a non-reticulata hybrid that arose naturally between wild *C. japonica* and wild *C. sasanqua* many years ago. In scientific circles the debate continues. But camellia growers call all of these sun camellias. And we are happy to have them—especially for sunny places where many camellias can't get along. Here's a run-down on the major sun-loving camellia groups.

STORY AND PHOTOGRAPHS BY BRADFORD KING





**'Yuletide' blooms
for the holidays
and is a popular
landscape camellia.**



A small cluster of 'kanjiro' is shown here.

Camellia sasanqua

Thanks to Japanese nurserymen and American nurseries with connections to Japan, the first sasanquas came to the U.S. from Japan to California in the 1930s. When nurserymen J.W. Uyematsu, the owner of Star Nurseries, and F. W. Yoshimura, of Mission Nurseries, were interned during World War II, their stock was picked up by sympathetic California growers including Manchester Body, the owner of Rancho del Descanso, now Descanso Gardens. During this process some of the original Japanese names were lost but subsequently a number of these plants were renamed and introduced into the marketplace. In addition many new cultivars have been introduced by American and Australian hybridizers.

C. sasanqua is the first camellia to come into bloom.. In California some begin in August but they generally peak in November and end in January. The profuse flowers are simple, single, and small to medium with six to eight petals; they are usually white or pink, or white with pink or red edges. Flowers open in succession for four to six weeks, and the petals fall after a few days—often forming a lovely carpet on the ground—which can be left as an attractive free-form artistic display. (There is little concern that the fallen flowers will cause petal blight, as fallen *C. japonica* blooms do.) An additional attraction is that many of the flowers are fragrant. In fact, a few people complain that they are too pungent. The dense, small-leaved foliage makes sasanquas ideal for topiary, espalier and bonsai. They are also excellent when used in landscaping for hedges, foundation plantings, patios, terraces and courtyards in full or partial sun. Their beauty comes from the profusion of lovely masses of flowers and evergreen foliage.

Three good pink sasanquas are: 'Hugh Evans', a profusely blooming single; 'Jean May', with a loose peony to formal double soft pink flower; and 'Bert Jones', a large single fragrant silver pink. 'Bert Jones' has whip-like growth that makes it a good candidate for training as an espalier.

If you prefer white with a pink or red border, consider a number of choices: 'Narumigata' has a cup-shaped white flower with a pink edge and crinkled petals; it blooms early to midseason. 'Navajo' can tolerate cold but does best in full sun; it has a semi-double rose red flower with a white center. The original 'Navajo' was imported from Japan under another name, and propagated by Nuccio's Nursery, but its name tag was lost in shipping. 'Rainbow' is a large white single with a red border. Personally, I like 'Double Rainbow', the best of this style sasanqua, with its white semi-double flower with rose-colored edge. 'Yae-arare' (Double Hailstone) is very popular due to its large white flower with pink on the tips of the petals.

In my opinion the two best whites are 'Setsugekka' and 'Mine-no-yuki', which is sold frequently in the U.S.



C. sasanqua 'Double Rainbow' has large white blooms with a rose border.

as 'White Doves' and 'Snow on the Mountain'.

If you want an anemone-form sasanqua, 'Chojiguruma' (Wheel of Anemone) makes an excellent choice. It has lovely miniature light pink flowers with deeper pink tones on the edge of the petals.

Camellia hiemalis

This camellia species has only 41 cultivars listed in the 2009 *Camellia Nomenclature* but includes several cultivars that have gained well deserved popularity for their beautiful flowers, attractive foliage and usefulness as landscape plants. The best red-toned sun camellias are found in this group. For example, 'Dazzler' has a medium, rose-red semi-double flower, and grows vigorously into an open spreading bush. It was introduced by Nuccio's Nursery in 1960. Tom Dodd, Jr., from Alabama bred 'Bonanza', an excellent large, deep red semi-peony bloom with wavy fluted petals. It has a long lasting flowering season—it blooms early and often, and keeps producing flowers through the fall.

The profuse, small, red semi-double to rose form flowers on 'Shishigashira' (Lion's Head) bloom on a low compact shrub with small, serrated dark green leaves. It is originally from Japan, dating back to 1894. It does well in a pot, as a hedge, or trained for espalier. It is a mainstay in my garden, where it has bloomed for thirty years. My plant is 5 feet by 5 feet by 3 feet. It rarely needs to be pruned—basically only to remove dead wood or



'Star Above Star':
white petals shade
to lavender, with
unique form of one
star superimposed
on another star.

cut back branches encroaching on the garden path.

If you are looking for a small compact camellia for a ground cover or a small space, 'Dwarf Shishi' will fit the bill. A seedling of 'Shishigashira', introduced by Toichi Domoto in 1988, it has the bright red flower of its parent. Another presumed seedling of 'Shishigashira' is 'Showa-no-sakae'. It is semi-double to peony in its form and bears a soft clear pink flower which blooms early; it is a low grower that makes a waist-high hedge or groundcover. 'Showa Supreme' was a chance seedling of 'Showa-no-sakae' and has a larger, peony form pink flower that many consider an improvement of its parent. It was originated by Nuccio's Nurseries.

No one should overlook the very popular 'Kanjiro', with its rose pink shading to rose red medium semi-double flower that grows on an upright bushy plant that can reach 20 feet in height. It makes a great show as a specimen plant or as a hedge. It sets seed readily and is one of the best camellias for use as grafting understock.

Camellia vernalis

The beautiful deep pink shading to darker pink in the center of the flower 'Egao' is one of the loveliest heralds of the camellia season. With its medium pink bloom of 16 to 20 petals with clear yellow anthers, 'Egao' looks more like a *C. japonica* than a *C. sasanqua*. Its Chinese name is 'Xiaoyan', which translates to "smiling face" as does its Japanese name Egao. It was brought from Japan to the U.S. in 1970s by Nuccio's Nurseries. The medium leaves and vigorous upright spreading growth habit make this camellia a good specimen plant as well as a show winner. It blooms in Southern California from November until February, depending on local conditions.

When 'Egao' is infused with virus variegation it is called 'Shibori-egao' (the prefix "shibori" means variegated). Originated at Kurume in Japan and imported to the U.S. by Nuccio's Nurseries in 1974, this exquisite pink bloom with white blotches is a show winner. The leaves are oval and green with yellow splotches due to the virus. It is less vigorous than 'Egao', prefers less sun and is more spreading in growth habit, overall a very showy camellia plant and flower.

Grady Perigan of San Marino, California, discovered a sport of 'Egao', now bearing the name 'Grady's Egao'. The flower is smaller than 'Egao', lighter pink and veined, with a fine white edge. The plant is also more compact in growth habit, with smaller foliage; it sets buds at an early age. It is propagated at Nuccio's Nurseries.

The Nuccios caught a very interesting flower and growth habit sport from 'Egao'. It has ruffled pink petals in a semi-double to loose-peony form with distinctive zigzag branches that look like a corkscrew—thus the name 'Egao Corkscrew'. A variegated form called 'Shibori-egao Corkscrew' is also available. Both forms make wonderful camellia bonsai. This camellia is listed in the *Camellia Nomenclature* 2009 as a non-reticulated hybrid.

In 1964 McCaskill Gardens of Pasadena California introduced their *C. vernalis* seedling 'Star Above Star'. The semi-double flower form of one star superimposed on another star received the Ralph Peer Sasanqua Seedling Award for 1969. The petals are white, shading to lavender pink at the edges. The shrub is vigorous, bushy and upright, and looks good as a specimen or as part of a landscape planting of mixed sun camellias.

Nuccio's extremely popular *C. vernalis* 'Yuletide' blooms during the holiday season with its single, evenly shaped, bright glowing red petals and tight center burst of golden stamens. The dense dark green foliage on an upright shrub makes for a neat hedge, foundation plant or container plant.

I grow all of the above *C. vernalis* camellias because of their early blooms, beautiful colors and versatility. I have 'Egao Corkscrew' as a bonsai. 'Shibori-egao Corkscrew' is a potted specimen that is moved to the the patio when in bloom. 'Egao', 'Grady's Egao' and 'Shibori-egao' are used as sunny landscape camellias that also are good show winners in the species class. 'Star Above Star' is a front-yard foundation plant—and also a show winner. Five 'Yuletide' plants were used as a small hedge for many years. I now use 'Yuletide' as a seed parent in hybridizing.

As you see, many camellias will not only thrive in direct or partial sun but also possess lovely flowers and evergreen foliage that can enhance your landscape by serving as foundation plants, hedges and specimen plants. When you make sun camellias part of your camellia garden, along with *C. japonicas*, non-reticulata hybrids and *C. reticulata*, you can stretch the camellia blooming season in some areas to nine months of the year. ■





'Egao' means "smiling face," a name that captures this lovely pink flower

The Fine Art of Grafting

Use it to propagate a rare variety or heirloom. Here's how. **BY BRADFORD KING**

One of the biggest thrills for a camellia lover is to propagate a camellia by grafting—and then see that graft take off. Besides the fun of it, there are at least three good reasons to learn this skill. First, a grafted camellia usually will bloom in two years, which is a significant time saving compared to the five to seven years for propagating by cuttings. Second, your favorite camellia can be grafted on a large mature healthy camellia—which gives you the best of both worlds. Finally, grafting is frequently the only way to obtain scarce, unusual or new camellias.

I have to say that the appeal of propagating a rare camellia is a powerful lure for me. While I live less than a 30-minute drive from Nuccio's Nurseries, which carries hundreds of camellias, there are many desirable varieties that they don't grow, for example, the *C. japonica* 'Margaret's Joy', the lovely medium formal double white with peach tones in the center; the *C. reticulata* 'Larry Piet', developed by Meyer Piet; and the exciting new species *Camellia azalea*. You may have a family heirloom camellia not available in a commercial nursery that you wish to share with friends or grandchildren.

Bev Piet, the wife of Meyer Piet, has left their family home where Meyer planted all of his 38 camellia introductions. I have been grafting a number of his introductions so that she can take some to her new home while I am adding to my own

collection. Many older camellias have been lost as well as ones named for friends and relatives—grafting is a great way to keep them going.

HOW TO GRAFT

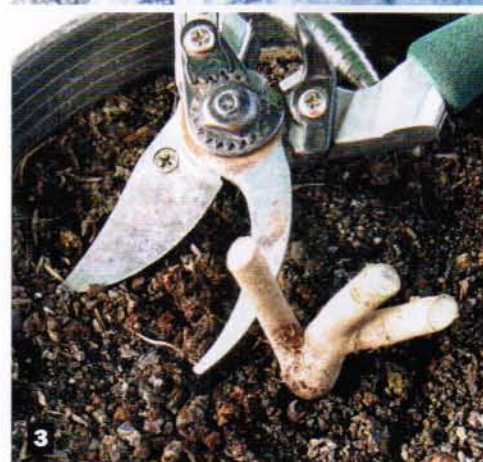
While there are a number of grafting methods, here I'll talk about the cleft graft—the most dependable, successful and popular method with camellia enthusiasts.


When is the best time to graft? It is not a joke to say, "When you have a good scion and the time and inclination to graft." Grafting can be done any month of the year but most frequently in February, as well as January and March.

What is needed to graft? The following items are required: a scion, rootstock, pruning shears, a sharp knife, cutting block, small screwdriver, rubber bands, a clear plastic bag, rooting hormone, coat-hanger-size wire, and labels. Optional items include a single razor blade, fine tooth saw, plastic tape and a magnifying glass.

The scion is dormant wood from the plant you wish to propagate. Mature wood from the last season is best. Generally it will be brown, shiny young bark as opposed to older gray hardened wood. While scion wood with one eye or growth bud is sufficient, two are better.

The rootstock is the living plant you graft onto, and it must be compatible with the scion; therefore, it is obvious it must also be a camellia plant. Healthy and





A first year graft
of *Camellia azalea*
done in April
produced three
blooms that fall.



vigorous *Camellia sasanqua* and *C. japonica* plants are both good choices. A rootstock grown in a container, with a main trunk the size of a pencil, is optimal but larger rootstock in the ground or in a container, is also acceptable. My personal favorite variety for grafting is 'Kanjiro', because it is usually available and reasonably priced; but even better, it has a thicker cambium layer than most other varieties. When I am grafting to obtain a viral variegated plant (more on this later), *C. sasanqua* 'Shibori Egao' and *C. japonica* 'Adolphe Audusson Variegated' would be my picks.

STEP BY STEP

1. The matching of the scion to the rootstock is the key to successful grafting. First, cut the rootstock cleanly 2-6" inches above the ground on an angle cut with a flat top and then split. (See Figure 3) This is sometimes called the "diamond" cut. It is usually the preferred manner with container rootstock $\frac{3}{4}$ " in diameter or smaller. If the rootstock is larger, a single flat cut across the diameter of the plant is better.

2. Taper the scion with a sharp knife into a 1" wedge shape. (See Figure 2) Insert the scion into the rootstock so that the cambium layers of both match up. (The cambium layer is the thin green layer just beneath the bark.) Use a small screwdriver to open the rootstock split and allow the scion to be snugly inserted. The green cambium on the rootstock must match the green of the scion; use the magnifying glass to double check the match. One way to insure that the match is made is to insert the scion leaning slightly, thus crossing the cambium layers. When the rootstock is large, I match one or two and cross one, seeking to increase the success rate. (See Figure 4). If you are a perfectionist, the leaf stalk on the scion should be placed at the point of juncture with the stock—it seems as if there is extra cellular activity at this point, which will help callusing. The practice of cutting the scion to expose the cambium above the point of insertion is also helpful in callus formation. The callusing will grow from both the scion and the rootstock, combining to make a firmly attached graft.

3. When you are satisfied that the cambium layers are matched, label the graft

with the appropriate name of the scion and wrap the scion to the rootstock with a rubber band or plastic tape. In areas with high humidity like the Southeast, wrapping may be eliminated as long as the graft is firmly set in the rootstock. Lightly dust hormone powder (Rootone with fungicide, for example) on the graft insertion point to assist in growth activation and to reduce fungus. Cover the graft with a clear plastic bag; a one gallon container can be covered with an inexpensive food bag, supported by two wire structures, and secured with a plastic plant tie wrapped around the pot. A coat hanger or similar wire can be easily bent in a half circle to provide adequate structure. (See Figure 5) Larger containers can be covered with larger food storage bags or plastic covering from a commercial

callus with some new growth—this indicates that it is time to put a hole or two in the plastic bag. (See Figure 7) Increase the size of the holes every day for a week. If the graft begins to wilt, replace the plastic until the graft can tolerate more air. One of the axioms of grafting is that more grafts are lost by premature exposure to air than any other cause.

During the first year the graft requires the same conditions as any other camellia—shade and moisture. In addition it will require protection from the damage of children, rabbits, dogs, skunks and insects, especially aphids which eat the new growth, leaving it wilted and the baby leaves dried up and dead. Ants and aphids go together—get rid of both. Aphids can be removed by hand or sprayed off the

leaves with water. You can use a mild insecticide such as Safer Insecticidal Soap, which is soapy water in a spray bottle. A first-year graft will need to be watered normally, but no extra fertilizer is required. In fact, fertilizers during the first year may damage or kill the graft.

After the first year a camellia graft is treated in the same way as any camellia growing in a pot. A graft may be planted in the ground when it has branched out and is at least 18" in height.



C. Japonica 'Carter's Sunburst Variegated'

laundry. There must be no holes in the bag or moisture will not be retained. You will know if the bag is functioning as needed if moisture forms within an hour or two on the inside of the bag. No additional water is needed unless you observe lack of moisture inside the bag. A slightly dry graft is better than a wet graft. (See Figure 6)

FOLLOWING UP

After several months, when the graft shows a sufficient callus uniting the scion and rootstock, it is time to acclimate the graft to lower moisture conditions. The amount of scion growth is not the key factor but rather the formation of a sound


and the other a variegated scion. This virused scion will infect the rootstock, producing a variegated camellia. In fact, when you have a camellia with limited variegation and you wish to increase the amount of white in the flower, a virus scion may be inserted in the camellia by means of a bark graft to inculcate additional virus. However, once a plant acquires the virus, it is generally not reversible.

In general, the more advanced camellia grower seeking to grow the newest show flowers or to hybridize with the most recently introduced species, will need to graft to stay on the cutting edge of the camellia world.

[Return to TOC](#)



'Arcadia'



The Legacyof..... Meyer Piet

Creator of space-age hardware
and camellias, he left us some
still-prized hybrids

BY BRADFORD KING

DURING A HIGHLY SUCCESSFUL CAREER in the aerospace industry, Meyer Piet solved mechanical engineering problems by continually looking for unique ways to get things done. He had the joy of seeing a number of his company's products go to the moon and outer space—controlling re-entry vehicles, including the space shuttle. After retirement, from the early 1970s to the 1980s, Meyer applied that same sort of creative non-linear thinking to a prodigiously creative period of camellia hybridizing. Just one example: When controlled crosses using easy-to-grow *C. japonica* seedlings produced uninteresting plants, he theorized that using difficult, non-compatible crosses could produce unique seedlings. Therefore he worked with *C. granthamiana*, which is not usually compatible

with other camellias and has seeds that take about 11 to 12 months to mature. This line of reasoning led to 'Sean Armijo', a cross with 'Crimson Robe' and a *C. granthamiana*—a brilliant red bloom with white speckles and large rabbit ears.

Meyer Piet was by all accounts a brilliant man. Today, we have him to thank for still-popular varieties such as 'Emma Gaeta', 'Larry Piet', and 'Arcadia'. Three others are also grown and seen in shows: 'Bev Piet Variegated', 'Sean Armijo' and 'Lee Gaeta'. 'Fiesta Grande' is a color break, and an excellent landscape camellia which occasionally appears at shows.

Meyer's legacies are his passion for camellias, woodworking (another skill that blossomed during retirement), and friends and family.

THE CREATIVE HYBRIDIZER

Working out of Arcadia, California, Meyer and his hybridizer friend Lee Gaeta registered 12 *C. japonica*, nine non-reticulata hybrids and 16 *C. reticulata* hybrids. Most of these were named after friends and family members.

It is clear from his introductions that developing dark red *C. reticulata* camellia blooms was a major priority. 'Bev Piet' is named for his wife. This very dark red, medium semi-double flower is a cross between two reticulata hybrids—'Fire Chief' and 'Nuccio's Ruby'. The variegated form is very striking, with white blotches contrasting sharply on dark red. The rich dark red, large-to-very-large rose form double flower named after Meyer's son Larry is considered by many to be his very best introduction. The other red introductions include: 'Alma Wood', 'Hody Wilson', 'Lee Gaeta', and 'Fight On'. Meyer was an avid University of Southern California football fan, and originally named the cardinal bloom with golden anthers 'USC Fight On' after the Trojan colors of cardinal and gold. (He also considered calling it 'Sprit of Troy'.) When he and Lee registered the bloom it was shortened to 'Fight On', the team's song.

A second hybridizing objective was to develop distinctive large pink or rose pink flowers. Toward this end he introduced 'Arcadia', 'Brian Gaeta', 'Dolores Hope', 'Emma Gaeta', 'Karrie Armijo', 'Margaret Wells Choice', and 'Sandra Gaeta'. Two of these lovely varieties continue to be favorites at camellia shows. 'Arcadia' is named after Meyer's and Bev's hometown. The flower is a very large salmon pink. 'Emma Gaeta' is named after Lee Gaeta's wife. This bloom in its variegated form is a show-stopper with its deep rose pink heavily marked with splashes of white.

Meyer and Lee were also interested in hybridizing for yellow camellias. They worked with a camellia called 'Mystery Yellow'. They found, as did other hybridizers, that most of their efforts led to a variety of white blooms or an occasional cream-colored flower. They introduced 'Olympic Gold' a seedling of *C. Nitidissima*, which is a 2-inch single, semi-double light yellow. According to Meyer and Lee, this hybrid was the first true yellow camellia to bloom in the United States. Bev Piet tells us a different story. She remembers Meyer and Lee enthusiastically rushing into the house




'Bev Piet Var.'



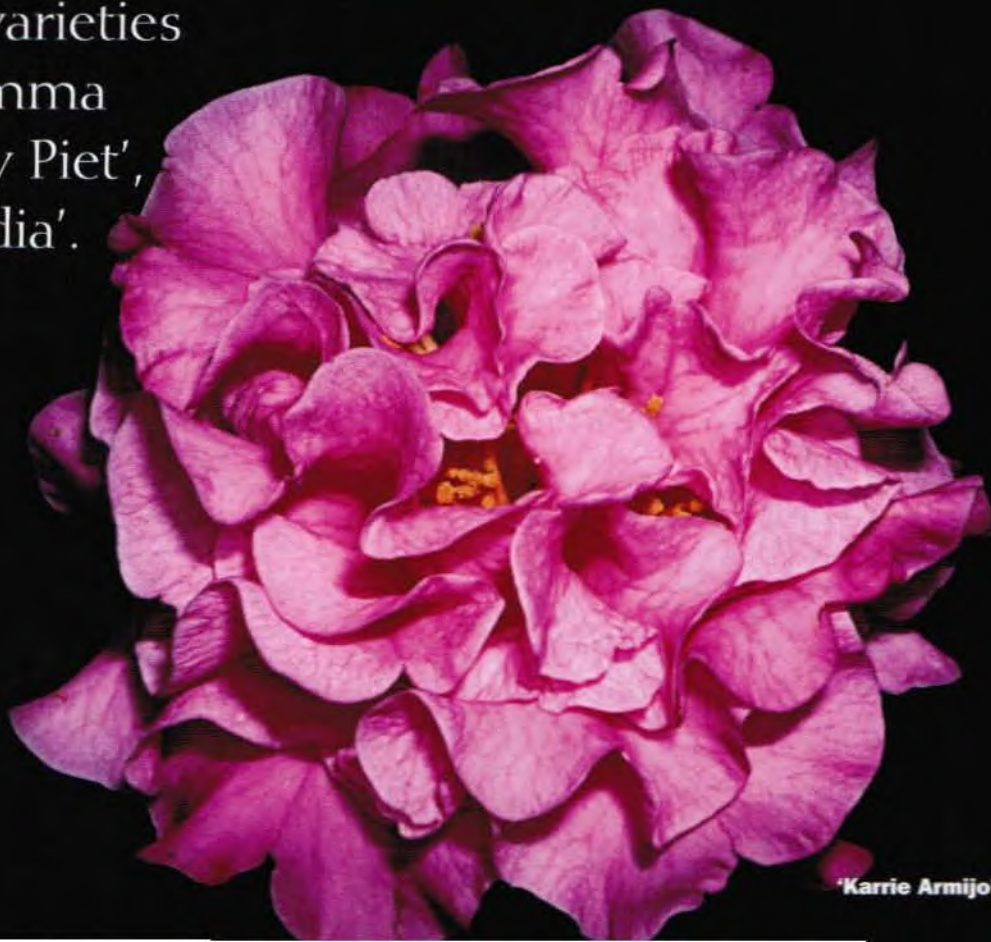
'Larry Piet'

ROBERT MARCY



Meyer Piet was by all accounts a brilliant man. Today, we have him to thank for still-popular varieties such as 'Emma Gaeta', 'Larry Piet', and 'Arcadia'.

'Emma Gaeta'



'Karrie Armijo'

.....
The development
of fragrant camellias
was also a major
hybridizing goal.



'Emma Gaeta Var.'



BRADFORD KING



Bev Piet holding 'Bev Piet Variegated'.

with news of their latest new yellow camellia. She said "They were all white with cream tones."

Piet and Gaeta, of course, had many other successes. For one, they achieved a true color break with 'Fiesta Grande'. This light lavender-pink medium-sized flower continues to be popular, especially in its variegated form. Piet said that after a thousand attempts this was his best cross from 'Flower Girl'. He affectionately called all its seedlings the "Girls."

The development of fragrant camellias was also a major hybridizing goal. Meyer felt his best results were made from crosses with a *C. japonica* Higo called 'Nioi-fubuki', which translates to "scented snow storm". The best example of this line of his work is 'Bessie Dickson', a fragrant white, medium anemone form.

In the process of making thousands of controlled crosses, several new and interesting flowers were developed. In 1980 Meyer crossed *C. reticulata* 'Cornelian' with *C. japonica* 'Mrs. D.W. Davis'. That resulted in a dark red, 5-inch bloom with a mass of golden stamens. The irregular semi-double form makes it look like a Japanese Higo. A 15-foot tall by 10-foot specimen graces the family home. Meyer named it after a friend from Japan, Yoshiaki Andoh. It is an "American Higo."

One of Bev Piet's favorite flowers is 'Razzle-Dazzle', a lovely red boom with pink and white stripes. This medium anemone-form *C. japonica* produces a striking flower.

BEYOND CAMELLIAS

Meyer Piet was a very active man with many interests along with camellias. An avid wood carver, he hand-carved numerous works of art. In February 1969, newspaper reporter Clair Harmony wrote, "Meyer Piet is one of today's great wood carvers in America." Meyer gave each of his grandchildren a carved wood caricature of themselves when they graduated from high school. He particularly enjoyed carving western figures "because cowboys and the Wild West are important parts of American heritage." Bev Piet, his engaging widow, has several of their favorites in their lovely home.

And we all have his camellias to remember Meyer by, especially the camellias he introduced and named for his friends and family.

ROBERT MARCY

A close-up photograph of a camellia branch. A white identification tag is attached to the branch, featuring a circular logo and the text "Camellia" and "F1". The branch is surrounded by numerous bright green, serrated leaves. The lighting is bright, creating highlights on the leaves.

Roots, Bark

The non-blooming camellia parts are beautiful in their own right. Understanding how they work makes you a better grower.

STORY AND PHOTOGRAPHS BY BRADFORD KING



**Crinkled holly-like
leaves of *C. japonica*
'Holly Bright'.**

Leaves

Camellia plants are cherished for their beautiful winter flowers when virtually no other plants are in bloom but there would be no lovely flowers if it weren't for the roots, bark and leaves. The trunk and branches provide a vital transportation system to take up water and minerals vital for the whole plant's health. The heartwood has another role—it is hard and an attractive light tan color, and can be made into handsome objects. Altogether, camellia roots, trunk, branches, bark and leaves work in symphonic harmony to produce a healthy flowering camellia. Take a closer look at them to see how interesting and handsome they are—especially when there are no blooms around.

ROOTS

Generally, a camellia's root system is equivalent in size to its aboveground canopy. A small camellia's root system spreads less than a large well-branched one, and a narrow plant, grown from seed, will have a less-spreading root system and a deep tap root to keep the top stable. Camellias grown in the landscape should be allowed to develop a tap root to help anchor the plant and improve its chances to survive droughts. Dan Charvet, in the 2007 *American Camellia Yearbook*, discussed the importance of landscape camellias having a tap root with a robust root system. He correctly points out that as water supplies become in shorter supply, less water can be allocated for landscape plants. In San Diego County, it is local lore that a group of mature camellias survived for years on rainfall alone in a secluded area between freeways. The average rainfall in Southern California is only 12–20" and the importance of a well-developed root system cannot be underestimated.

On the other hand, a container-grown camellia plant that is allowed to develop a tap root for a number of years may send its roots around in a circle limiting the plant's stability and leaving it vulnerable to becoming top-heavy. Therefore, most camellias grown from seed have the tap root clipped before planting in a container to encourage a spreading root system. Repotting every two or three years can also help in solving any container-bound problems.

Older camellia roots are generally brown and new roots are white. When a mature camellia develops surface roots, they should be allowed to grow freely and not covered by soil or heavy mulch. Camellia roots enjoy exposure to air which assists in the exchange of oxygen and carbon dioxide necessary for a healthy plant. The main function of the roots is to extract water and dissolved minerals from the soil through osmosis. Camellia roots love an abundance of air. For example, when repotting three-year-old seedlings in 1-gallon pots with shade cloth lining the bottom of the pots, I was amazed at the extensive white roots growing throughout this inorganic medium. Newly planted



camellias may slowly die if planted too deeply. Likewise, a heavy, compacted soil lacks enough air for a camellia to thrive—plants are literally smothered to death. It is a good practice to leave the root ball an inch above the soil surface to allow for settling. This is why camellia seeds are set on top of the soil and not covered. Typically the root emerges first and penetrates the planting medium, and then the stem develops and grows toward sunlight.

Many growers mulch their camellias to assist in retention of moisture, retard the growth of weeds and provide an attractive ground cover. Mulching with pine needles, oak leaves or pine bark assists in providing the acid conditions appreciated by camellias. Other growers find that mulch interferes with raking and removing spent blooms (deteriorating camellia flowers can cause petal blight and are usually removed, and never used in compost). When mulch decomposes, it can leach small amounts of needed nitrogen from the soil but this can be cor-

rected with applications of fertilizers. In other words, there are pros and cons about using mulch—including which mulches are best. However, there is one incontrovertible truth. If a camellia is mulched, the mulch should be left loosely textured so that there is air circulation. Watch out for mulch which has been applied for a number of years and decomposes, slowly building up the soil surface around the root crown, producing the same impact as planting too low. This may be the reason your otherwise healthy mature camellia begins to deteriorate. As a preventive step, gently rake the decomposed soil from the camellia trunk to allow better air circulation. Over-watering has the same impact on a camellia. Too much water will cut off the air that the roots must have.

This knowledge of the root system leads us to appreciate two key principles of growing robust camellias: First, camellias should be moist at all times but not wet. Second, camellias require a well-drained soil high in humus and slightly acid.



New growth on 'Night Rider' has lovely crimson leaves and bark.

BARK

The bark forms the outermost layers of a plant's trunk. It serves as a physical barrier that shields the cambium (the thin green vascular layer) where vital, living tissue resides. Generally bark refers to all plant tissue outside the cambium layer. It is the first line of defense against harmful natural elements, helps reduce water loss and shields the cambium from intense sunlight, extreme heat and cold.

Dark sap oozing from the bark is a sign of infection. Wounds provide opportunities for insects and diseases to take hold. As a grower, you should protect against bark damage as camellia bark is thin and potentially prone to injury from gardening implements. Camellia growers frequently prune the lower branches to provide more air circulation and ultimately better blooms. However, if the lower portion of the plant is exposed to direct sunlight it can cause "sunburn." Eliminate this by using a tree well (a berm of earth around



Camellia wood artifacts carved by Grady Perigan.

Camellia foliage can be very varied with a number of unique and interesting leaf forms, including variegated and serrated.

the plant) or other means to protect against excessive direct sunlight, cuts, or hand tools used for removing weeds.

In general most camellias have bark in shades of brown-gray, which contrasts nicely with the green leaves. There are a few notable exceptions. *C. japonica* 'Dahlonga' has a cool gray bark that shows off its creamy yellow blooms and dark green leaves. It was introduced by Walter Homeyer of Georgia in 1986, the 50th year of Nuccio's Nurseries, and thus is sometimes called 'Nuccio's Golden Anniversary'. Walter named the camellia after the famous Georgia town of Dahlonga, where America's first major gold rush occurred in 1828. Dahlonga is a Cherokee word for yellow—it seems that gold was found right on the ground. There are other camellias with rust red bark, such as *C. trichocarpa*, *C. yunnanensis* and *C. crapnelliana*. *C. assiniensis* has a small, single white flower and beautiful foliage; the new growth is a light maroon red that turns green when mature. The hybrid 'Night Rider' is a seedling of 'Ruby Bells' and *C. japonica* 'Kuro Tsubaki' (the black camellia) has red tones in its roots and the new growth of leaves and branches is an attractive deep maroon which becomes dark green with age. Os Blumhardt from New Zealand is the hybridizer of this interesting camellia.

LEAVES

The dark evergreen foliage of *Camellia japonica* makes it a highly desirable shade-loving landscape plant. While we eagerly anticipate the flowers, we are rewarded all year with the classic beauty of the glossy, smooth-textured, deep green leaves. Camellia lovers also appreciate the smaller foliage of the hybrids with their many tones of green and the leathery, deeply indented veins that give *C. reticulata* its name.

Although camellias are evergreen, they shed leaves as part of their normal life cycle. Generally, leaves five or six years of age are shed in the spring when their stored nutrients are at their lowest. They begin by turning yellow, then brown and drop off to be replaced in the "spring flush" with new leaves.

Leaves serve an essential function by manufacturing food for the plant. Chlorophyll makes them green, and sunlight must be sufficient for photosynthesis—the process by which carbon dioxide and water vapor makes simple sugars that are transported in the sap throughout the plant. This process is most active in the bright sunlight of summer during the camellia growing season. While most camellias thrive in partial shade, they will not bloom in deep shade because of the reduction in photosynthesis resulting from low sunlight. There are notable exceptions to this generalization. The so-called "sun camellias" (*C. sasanqua*) are greatly appreciated for their early, profuse blooms and tolerance of sunlight. In the other direction, yellow camellia *C. nitidissima* generally requires more shade to flower and thrive. Dr. George Orel, reporting on a 2007 camellia trip to Viet Nam in *The Journal of Camellias Australia* (#177 Winter 2008), found five new species, one with an orange flower, growing in the dark, warm understory of a tropical rainforest. This continues to show us that the biodiversity of *Camellia* species is yet to be tapped. In general though, camellias do best in partial sun such as a northern or eastern exposure, either under the shade of taller trees, in a lath house or under 50 percent shade cloth.

Leaves also help regulate the temperature of the plant by a process called transpiration. In hot, dry summer heat, leaves are cooled by water evaporation through stomatal pores. This is a major reason why camellias greatly appreciate afternoon showers or, in areas like Southern California with no summer rain, a liberal sprinkling in late afternoon when sunlight and heat are lower. In my Southern California garden, this is a practice I try to keep when the temperature is above 85°F. In winter the stomata on the underside of the leaves close automatically to regulate the plant temperature.

Camellia foliage can be very varied with a number of unique and interesting leaf forms. One of the most unusual *C. japonica* leaves can be found on 'Ginyō-tsubaki'. It has a very small, light gray



'Benten-kagura' foliage sport of 'Daikagura'.

green leaf with a narrow, darker green, heavily serrated edge. The plant grows very slowly and has a single tubular red flower. The large, semi-double salmon red flower of the unusual *C. japonica* 'Holly Bright' has unique crinkled, holly-like foliage.

Viral-induced variegation of foliage is usually a by-product of seeking to produce white blotches on a bloom: e.g., 'Frank Houser Variegated'. The leaves in viral variegation are randomly patterned, sometimes removing most of the green in the leaf. Genetic variegation



Loss of most of the green in the viral variegated leaf of the *C. reticulata* 'Frank Houser var.'

The unusual leaves of *C. japonica* 'Ginyo Tsubaki'.

tends to produce more regular patterns. Camellia sports occur not only in flowers but in foliage, and these genetic leaf mutations come in various forms. For example, 'Taiyo' has rich green leaves with an irregular yellow pattern along its center. 'Benten-kagura', a foliage sport of 'Daikagura', has irregular green leaves with a more clearly defined yellow gold variegation. The term "Benten" is used in Japan to indicate a variety with the leaf darker in the center and a lighter margin. A good example is 'Hanadaijin-benten', which has a green, irregular-shaped leaf

bordered with a light yellow margin. This sport of 'Hana-Daijin' has a deep rose pink single bloom.

Camellia species have a wide variety of leaf forms. The *C. sinensis* noted for making tea has small oblong leaves with its margin thinly serrated; *C. azalea* has long narrow, smooth spherical leaves that are rounded at the tip; *C. nitidissima* has elliptical shaped leaves with a thinly serrated edge and many veins on the surface; and *C. amplexicaulis* has oblong-elliptical shaped leaves that are finely serrated and heavily veined. Interestingly there are two

C. amplexicaulis leaf forms. One form has a long leaf ("Atagawa") and the other a shorter leaf ("Terada").

In conclusion, one can only appreciate the leaf diversity among camellia species and varieties, noting their magnificent beauty while serving the utilitarian purpose of providing food for the plant and visual pleasure to the camellia lover. The foliage camellias are interesting landscape specimen plants which also have nice flowers. In addition they are excellent for bonsai, hedges and espalier. Why not try them yourself?



Growing Camellias from Seed

*Here's the why and the how, from collecting seeds
to transplanting them into pots* **BY BRADFORD KING**

A number of people have asked why you should grow camellias from seed. The practical answer is twofold: for the possibility of creating a new variety and to develop rootstock for grafting. However, there is also an intrinsic thrill in observing new life being formed and watching the stages of life unfold. This is one of the many reasons why gardening is such a widespread and popular activity today.

Camellias are easy to grow from seed but take five to seven years to bloom. In general seeds ripen in late summer to fall depending upon the species and where you are located in the United States. The seed pods develop during the summer growing season. When the round or spherical pods split open, they reveal from one to nine seeds. A mature seed is dark brown or black. A light colored or white seed indicates the pod was harvested prematurely.

How do you collect the seeds? I like to attach a nylon stocking or plastic onion bag over the seed pod in July or August. The bag can be attached to the stem of the plant with a plastic twist tie or clothes pin. This will hold the bag in place, so that when the pod opens up the seeds drop in the bag and are not lost on the ground. Alternatively, one can carefully monitor pods and pick them when the pod begins to crack open, but before the seeds fall to the ground. A third alternative is to pick the ripe pod, place it in a shallow dish or container, which is then put in a shaded warm place where it is safe from squirrels or sudden high winds. (I use plastic butter cups left uncovered or shallow dishes so the pods don't blow away or get lost.) A final method is to pick the pod and carefully cut the fruit in order to liberate the seeds.

When the seeds are out of the pod, soak them in very warm



Opposite page: 'Tama Peacock' has an attractive bronze-colored seed pod. Above: The author makes mini-greenhouses by covering seed-germinating containers and sprouting seedlings with plastic. Right: Pods are covered to prevent loss of seeds.



(hot to the touch) water for two hours. Seeds that float should be discarded; they are not viable. If needed, seeds may be placed in a plastic bag and kept in the vegetable section of a refrigerator for weeks. I prefer to plant them as soon as possible in a germinating jar or ziplock bag that is one-third filled with moist peat moss. The peat needs to be soaked for an hour or two before being used. Squeeze out the excess water by hand and place the seed on top of the peat. Place a white plastic label with the name of the seed parent first, then an X (meaning "crossed with"), and then list the pollen parent if known (e.g., 'Frank Houser' X 'Harold Paige'). If the pollen parent is unknown, use the (?) symbol.

When the seeds germinate 3 to 12 months later, and have produced three or four leaves, they should be planted in a pot. One

seed to a 4-inch pot or three to five seeds in a one-gallon pot will work. I prefer one or two seeds of the same controlled cross to a one-gallon pot. If you know the parents, label the pot and be sure to put seed from the same parents in the same pot. When I go to great lengths to do a controlled cross and the seed "takes", or the pod doesn't abort or get eaten, and the seeds germinate, I absolutely want to know the parentage!

Seeds should be planted in a loose, well-drained, slightly acid mix. A commercial camellia/azalea potting soil will work. I amend it with sand and small pine bark to make it loose and improve drainage. Camellias need to be moist but not wet. I use liquid starter fertilizer during the growing season, and half as much when seedlings are dormant during the winter months. Repotting or potting up every two years is best; it is required every three years for healthy thriving plants. Seedlings need the same growing conditions as other camellias. In addition, the pots may need protection from being knocked over by skunks, pets, children or wind. I fence them in and pack them tightly together under 55% shade cloth.

Camellia species have different kinds of fruit or seed pods. There is also variety in the characteristics of seed pods within a species. A general description of the seed pods of the three most common species are as follows:

JAPONICA

The seed pods are egg-shaped to spherical in shape. The pods are larger than those of sasanqua and smaller than reticulata. They are 2 to 4 cm long with a diameter of 2 to 3.5 cm. Each pod has three to five sections. The wall of the pod is 2 to 6 mm thick. There are generally three to seven seeds in a pod. The pods are green to brown with some being a lovely bronze. They tend to have smooth skin.

SASANQUA

This includes *C. vernalis* and *C. hiemalis*. Sasanqua have seed pods that are spherical to pear-shaped. They are small, 2 cm long and generally have three sections. The wall of the pod is 2 to 6 mm thick. There may be only one seed, but generally there are three to five seeds in each pod. The pods are smaller and darker in color than a japonica pod.

RETICULATA

The seed pods are generally spherical in shape, but flattened at the ends. They are 2.3 to 3.6 cm long and generally the diameter is greater than the length. The pods surface is rough and scaly and contains three to five sections. The wall of the pod is thick when compared to either sasanqua or japonica pods and can be a half inch or more in thickness. The texture is like an unripe cantaloupe or a very hard apple.

Remember: While growing camellias from seed is an easy task, it takes patience and persistence to get a plant to a level of maturity to bloom. While the new plant is genetically different from its parents, there is a low statistical likelihood of producing a unique or different enough bloom to register as a new variety. However, new plants are a good source for rootstock used in grafting. Whatever the outcome, growing seedlings is fun, and if you like to be surprised you'll have unlimited possibilities!

Camellia Soil Mixes for Landscape & Containers

The ideal soil for camellias is well drained and acid **BY BRADFORD KING**



A mixture of coarse peat moss and sharp sand provides a loose well drained quality mixture for camellias.

Camellias prefer a well-drained soil that is high in humus and slightly acid. A pH of 7 or less is acceptable but 5.5 to 6.5 is ideal. The use of coarse peat moss or oak leaf mold provides humus and the acid condition. When either is mixed in equal parts with "sharp" or "potting" sand, a loose, well drained quality mix is obtained. Fine peat moss frequently found in garden centers is not recommended. It easily becomes too wet or too dry; both conditions lead to loss of camellias.

LANDSCAPING

When planting a camellia in the ground, determine your soil conditions. A simple test is wetting the soil and then grasping a handful of it. If it remains loose and formless, it is sandy. If it forms a one or two inch ribbon, it is loamy. If it forms a two inch or more firm ribbon, it is clay.

If your garden soil is sandy, add oak leaf mold or coarse peat and small pine bark in equal parts in a hole dug twice the size of the root ball. If the soil is loamy, it has acceptable conditions. However, adding equal parts sand and humus to the soil will provide optimal growing conditions. When the garden soil is clay or adobe, remove as much of it as possible, add in equal parts sand, medium-sized pine bark and humus (coarse peat moss or oak leaf mold). This will make the soil well drained, acidic and rich in humus.

The pine bark decomposes slowly, keeping the mix loose for a longer period of time. As it decomposes, the bark does remove some nitrogen. However, it is a sound trade off to keep the soil loose and to fertilize with either cotton seed meal or a camellia/azalea commercial fertilizer once or twice a year.

Do not fertilize the first year you put a camellia in the ground. Camellia roots need to breathe. Soggy wet soil and dry, hard-packed soil destroy roots. In other words, camellias thrive in moist, not wet or dry, conditions. Therefore, add ingredients to your garden soil to get the optimal balance for your conditions.

CONTAINERS

Camellias thrive in pots but require special care for them to grow and flower. Camellias in containers require repotting or potting up every two or three years. The soil becomes depleted, soggy and heavy after three years.

Potting up is useful when a plant outgrows its container. For example, a camellia doing well in a one-gallon pot should be potted up to a three-gallon pot after two years and so on until the plant reaches the size the grower desires. Once the optimal size is reached, the camellia is repotted every two or three years, in the same size container. When repotting, roots are trimmed an inch or two with a knife then put back in its container with fresh potting

mix. While the same principles as with a camellia in the ground are followed, more careful attention is required.

First, the container must have an adequate drainage holes because camellias can't tolerate wet feet. The bottom layer of the pot can be gravel, broken crock, coarse wire mesh, etc. I prefer two or three inches of coarse pine bark.

Second is the potting mix. Do not use ordinary garden soil because it gets too hard and its humus is depleted quickly. The most convenient method is to use a ready made commercial camellia/azalea mix from your local garden center. However, many growers make their own mix.

My current mix is equal parts small pine bark, sand, oak leaf mold (or coarse peat moss) and a high quality commercial camellia mix. The commercial mix has "composted fir bark, sphagnum peat moss, mushroom compost, volcanic pumice

stone, earthworm castings, bat guano, kelp meal, feather meal, gypsum and a natural wetting agent *yucca shidigera* sponen." The percentages are not listed for this product. I would assume percentages can change and that various commercial mixes will have different ingredients.

Third, a camellia in a container will require fertilization. The easiest solution is to purchase a commercial camellia/azalea fertilizer using it as directed on the label. These products are to be used only during the growing season—April through September. Never feed a dry plant and be careful not to over feed, especially during hot weather (over 90°F).

A popular alternative is to use cotton seed meal during the growing season. It is organic and much less likely to burn the plant. A successful alternative is to use four parts cotton seed meal to one part iron. This will keep the foliage green and flower colors vibrant, especially the reds. Notice how much nitrogen is combined with the iron. An N=2 or 3 is optimal and one over 10 can be dangerous as it is combined with the nitrogen in the cotton seed meal for a total exceeding 15.

A fourth method is to use a liquid fertilizer formulated for acid-loving plants which can be applied with a watering can or foliage spray during the growing season. The best example is Miracle-Gro for azalea, camellias and rhododendrons. Please note that Miracle-Gro contains a high level of nitrogen – nitrogen 30, phosphate 10 and potassium 10 and all the iron and trace elements needed for healthy camellias. Therefore, I recommend cutting the manufacture's amount in half, especially for small plants and non-reticulata hybrids. Several application in two week intervals works well.

Do not use fertilizers when temperatures are above 90°F or you may burn the camellia leaves. During the rest of the summer growing season, I use cotton seed meal every 45 days. During the dormant season from October through February when buds are developing and blooms appear, a 2-10-10 fertilizer is applied. A number of other growers begin the growing season with an application of fish emulsion, followed by four parts cotton seed meal, one part iron and one part blood meal every 45 days during the growing season and 2-10-10 during the dormant season every 45 days.

Fourth, camellia seedlings grown in pots require fertilizing once the seed has been absorbed. Cotton seed meal is acceptable but the commercial dry fertilizers may be too strong for "babies." I prefer a liquid starter fertilizer applied every two weeks during the growing season which is cut in half during the dormant season. The objective is to keep the nitrogen level low (N=2 and never above 3) during dormancy. This is the period for bud and flower development in camellias so some phosphate and potash is desirable.

Finally, take time to enjoy your flowers. Blooms may be cut and used to decorate your home. A collection of blooms floating in a shallow bowl makes an attractive centerpiece. A single bloom with leaves in a small vase is attractive addition wherever you wish a touch of color. A container plant may be moved to a patio or window to better show its flowers as long as it is outdoors and has shade.



A well-rooted camellia seedling is ready to be potted in a loose, high-humus soil mix.



Descanso Gardens

A Peaceful Place for All Seasons

By Bradford King

In the foothills of the San Gabriel Mountains in La Cañada-Flintridge, California, north of Los Angeles, is the largest collection of camellias in North America.

The more than 30,000 camellia plants are in a California native habitat growing under a canopy of Coastal Live Oaks in Descanso Gardens. In 2001 the International Camellia Society recognized Descanso Gardens as an International Camellia Garden.

The Camellia Forest is the signature collection at Descanso Gardens with a blooming season from fall to spring, peaking in February. However, the gardens offer its 300,000 visitors a year much to enjoy through out the year. In spring, the tulips and daffodils poke their heads sunward giving locals a taste of an East Coast spring. The nine-

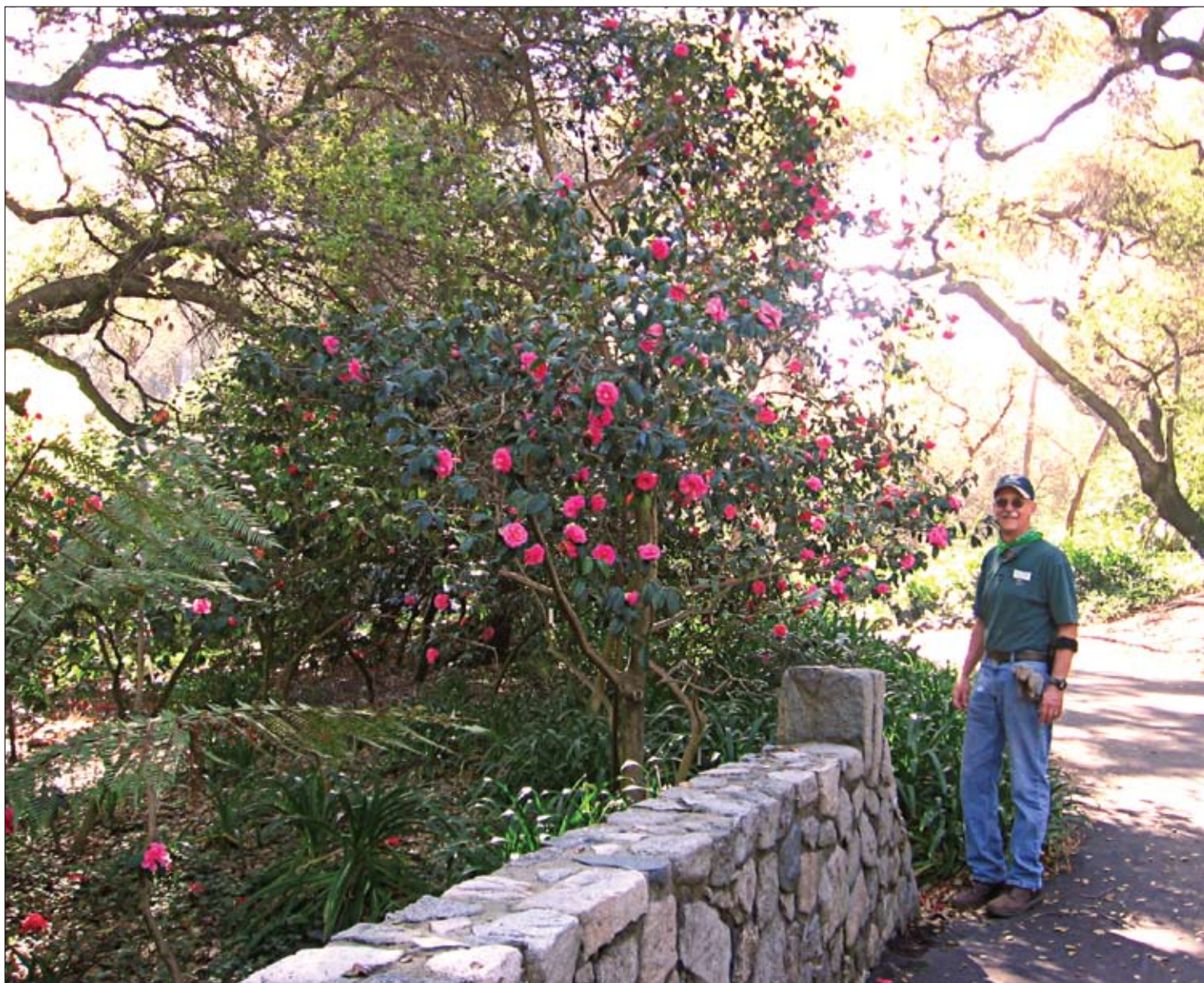
acre California Garden is planted with tough native plants against a backdrop of chaparral covered hills. Theodore Payne, a noted horticulturist, designed it to illustrate what Southern California looked like before it was developed for ranching, citrus crops and homes. The Rose Garden was begun by Dr. Walter Lammerts in the mid 1940's. He and Manchester Boddy, the owner of "Rancho del Descanso," as it was called then, envisioned a rose garden that reflected the history of the rose. The five-acre rose garden was revitalized in 1994 with new rose arbors, additions to the collection such as the Austin roses, keeping the historical theme intact.

However, the camellia is "Queen" of the Descanso Gardens. In 1937 Manchester Boddy purchased 125 acres of land in La Cañada where he raised cattle and began planting camellias with the intention of developing them

for the cut flower industry. By 1941 he had amassed a collection of 600 camellias. He and his family lived in a 22-room mansion built in the then popular Regency style.

As the camellia collection continued to expand, Boddy hired J. Howard Asper, a camellia specialist, as curator and chief propagator. Together they developed a commercial camellia plantation to serve the cut flower industry. Camellias became the flower of choice for corsages for the well-dressed ladies of the time.

Boddy added 60,000 camellias to his inventory during the forced relocation of Japanese Americans to internment camps during World War II. Boddy was an admirer of Asian culture and the Japanese in America. He purchased the entire inventory of two Japanese-owned camellia growers when they were forced into the camps.



Brad King



Above: Wayne Walker with the 'Shot Silk' tree.
Left: A closer look at a 'Shot Silk' bloom.

J.W. Uyematsu owned and operated Star Nurseries which was the largest and most successful in California. F.W. Yoshimura's Mission Nursery continues today as San Gabriel Nursery.

Howard Asper supervised the planting of thousands of these camellias beneath the oaks of "Rancho del Descanso." He grafted dozens of varieties onto 'Eureka' rootstock to enlarge

the camellia plantation that served their cut flower business.

In 1945 Dr. Walter Lammerts, of rose hybridizing fame, joined Boddy and Asper at Descanso. They admired the giant flowers of *camellia reticulata* varieties of 'Pagoda,' 'Captain Rowes,' 'Shot Silk' and 'Lionhead.' They envisioned hybridizing with them but none were available outside of China.

Dr. Lammerts' reading had identified a Chinese botanist in the Yunnan Providence of China who might be able to help. In early 1948, Professor T. Tsai, a botanist at Kunming Institute, wrote that 20 different cultivars of *reticulata* were available. These 20 varieties were shipped to San Francisco, but only 15 survived.

Ralph Peer of Los Angeles also imported 20 plants, of which only three survived. Fortunately, two of these that made it were cultivars that Descanso didn't have. Apparently, some of the 15 original survivors were duplicates so Descanso Gardens imported a further shipment of *reticulata* that resulted in 14 new and different cultivars available in the west.

The *reticulata* thrived in Southern California. Today Descanso Gardens maintains many of the original *reticulatas* from Yunnan China.

Wayne Walker, the current camellia curator, provides a very lively and interesting walking tour of the camellia forest. These walks occur on the weekends that Descanso is hosting local

camellia shows. These four shows offer a spectacular array of camellias from miniature blooms such as 'Sweet Jane,' to mid-sized 'Nuccio's Carousel,' to the huge blooms of reticulata 'Harold Paige' and 'Queen Bee.' Many of the attendees at the shows make their own "wish lists" of plants they would like to grow in their own gardens.

Taking a walk with Wayne Walker as my guide, I saw a very large salmon pink bloom hybridized by Howard Asper which he had proudly named after himself. However, many people believe that the crowning achieve-

ment of his career is 'Valentine Day,' a large formal double bloom that also is salmon pink. The legacy of Boddy, Asper and Lammerts as camellia growers and hybridizers continues today at Descanso Gardens.

Descanso Gardens has earned accreditation as a museum of living collections from the American Museum Association and this year is celebrating its 50th anniversary of its founding as a public garden.

Descanso Gardens is a peaceful place to visit and enjoy a stroll through its acres of camellia forest.



Brad King

Wayne Walker shows off a massive 'Howard Asper' bloom.



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Tulips abound at Descanso Gardens in the spring.

Brad King

