

DECEMBER, 1984

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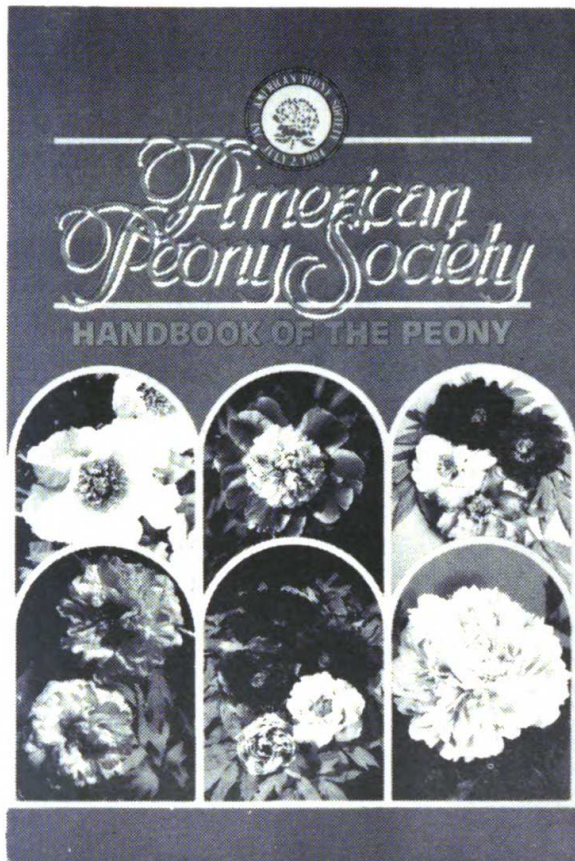
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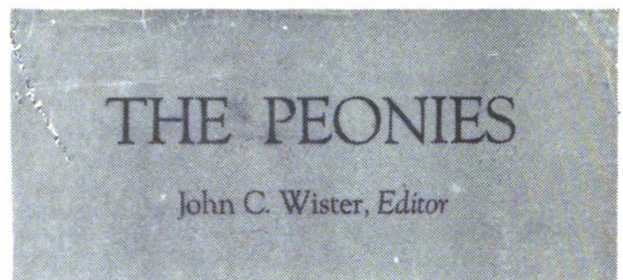
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THE AMERICAN PEONY SOCIETY

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A Christmas Reverie

Let us seek the grace of a cheerful heart, an even temper, sweetness, gentleness, and brightness of mind, as walking in His light, and by His grace. Let us pray to Him to give us the spirit of ever-abundant, ever-springing love, which overpowers and sweeps away the vexations of life by its own richness and strength, and which, above all things, unites us to Him who is the fountain and the centre of all mercy, loving-kindness and joy.

John Henry Newman

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DEPT. OF REGISTRATION

The department was formed to properly supervise the nomenclature of the different varieties and kinds of peonies. All new varieties should be registered to avoid duplication of names.

Greta M. Kessenich, Secretary

OBJECTIVES

The Articles of Incorporation state: Section (2) That the particular objects for which the corporation is to be formed are as follows: To increase the general interest in the cultivation and use of the Peony; to improve the methods of its cultivation and methods of placing it upon the market; to increase its use as a decorative flower; to bring about a more thorough understanding between those interested in its culture; to properly supervise the nomenclature of the different varieties and kinds of peonies; to stimulate the growing and introduction of improved seedlings and crosses of such flower; and to promote any kind of the general objects herein specified by holding or causing to be held exhibitions, and awarding or causing or procuring to be awarded, prizes therefor or in any other manner.

The AMERICAN PEONY SOCIETY BULLETIN is the official Society publication. It is mailed postpaid quarterly to all members in good standing.

MEMBERSHIP

The By-Laws state: All reputable persons, professional or amateur, who are interested in the Peony; its propagation, culture, sale and development are eligible for membership. Dues are as follows:

Single Annual	\$ 7.50	Junior or member family	\$ 2.50
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Family Annual	10.00	Commercial membership	25.00
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For those who wish to further support the Society, the following special memberships are available.

Contributing	\$25.00	Supporting	\$100.00
Sustaining	50.00	Patron	250.00



AMERICAN Peony Society Bulletin



December 1984 — No. 252

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FROM YOUR PRESIDENT

CHRIS LANING

Thanksgiving holiday is past, but things living continue on. It is now being joined by the Christmas season which is a time of giving --but a more beautiful thought is sharing, where other people become part owner of what one has. Sharing expands ownership whether it be of thoughts, actions, or possessions, thereby enhancing the vista of everyday living, expanding the soul.

Gardening is good! And with the passing of fall, there comes the opportunity for planning. Winter provides that time for thinking and evaluation.

This past growing season was exceptionally dry here in Michigan. Often for weeks at a time the peonies wilted but they received no watering from me since this is impractical. So even though they had a rough time of it, they prove they have all the stamina necessary to cope with adversity. Also, in spite of the dryness we have had an excellent crop of seeds. I think every peony lover ought to plant a few peony seeds thereby finding the real joy in seeing his own seedlings come into bloom! I should also say the various forms of blooms from single to doubles including the Japs from this peony seedling patch will prove that the great big double types are not the only things to be desired.

A pleasant thought has entered my mind as to expanding our seed distribution program but with an exciting difference -- for foreign countries a **seed exchange** activity that could be a boon to both foreign countries and the American Peony Society. Americans lead the world in peony hybridizing, which can benefit others while far away places have species and varieties that have properties which should be incorporated into our grand peony adventure. This is not just a passing thought; I really plan to make some contacts!

Our peony show this past June was a grand success! As always, it was the main event in the main season of our beloved peony world. Kingwood Center at Mansfield, Ohio, offers all the conveniences so desirable and needful for smooth operation. Now our thoughts turn to Champaign, Illinois, and to the Klehm Nursery where we will celebrate our next show -- show of 1985. Plan to be there!

MR. DONALD HOLLINGSWORTH AWARDED THE A. P. SAUNDERS MEMORIAL MEDAL

Dr. L. J. Dewey, Richmond, Virginia

Following the banquet of the 81st. annual meeting of the American Peony Society at the Kingwood Center, Mansfield, Ohio on June 16, 1984, the A. P. Saunders Memorial Medal was awarded to Mr. Donald Hollingsworth. President Edward Michau presented the coveted gold medal to Don and reviewed some of the many contributions he has made to the Society and to the advancement of the peony. With this award, Don joined a distinguished group of gold medalists and dedicated individuals, who have devoted so much of their time and effort to the refinement and promotion of the peony. It seems fitting here to consider some of his contributions and thus provide additional recognition of the many ways he is helping to keep the peony in the forefront of the flower world.

Many of the readers of this article will know Don only through his articles and even those who know him personally will find their acquaintance broadened through his writings. He is an accomplished and prolific author whose bibliography of peony articles alone might fill several pages of this Bulletin. It is therefore not possible to list all of his publications in this article but a few will be cited and others will be discussed in general terms. To get an idea of Don's output, consider the fact that for over a decade now he has been writing for this Bulletin and in recent years almost every issue of the Bulletin has contained at least one of his articles. In addition to the Bulletin articles, he is a regular contributor to **Paeonia** (the hybridists newsletter edited by Chris and Lois Laning) where he answers questions, gives advice and generally stimulates other breeders with his theories and observations. He also finds time to participate in round robin letters in which fellow hybridizers exchange personal observations and ideas. In most of his articles, he uses the scientific approach coupled with good organization to develop his themes logically, and the reader is led systematically through the arguments to sound conclusions. This approach stimulates the thinking of the reader and is the mark of a good teacher. Perhaps this comes naturally as a result of Don's years of experience in the field of education at the University of Missouri in Kansas City.

In his efforts to promote the peony, he is a very effective ambassador. In this connection his article for the American Horticulturist (1), written on the occasion of the 75th. anniversary of the American Peony Society, is a good example for in it he

effectively promotes both and Society and its flower. Approaching the promotion of the peony from a somewhat different angle, Don delivered a lecture, the text of which was reprinted in this Bulletin (2), at Florales Internationales de Montreal 1980. In perhaps a more scholarly mood, he covers a broad range of topics in this lecture including interspecies hybridization and some of its history, some cytology and genetics, a number of the *Paeonia* species, the occurrence of tetraploidy and its effect on fertility, propagation, the different peony flower forms, the new colors appearing in the hybrids, the Itoh hybrids, the controlled germination of peony seeds and much more. The lecture as published in the Bulletin is accompanied by an extensive bibliography.

One of the milestones in the annals of the American Peony Society has been the publication of "The Best of 75 Years" (3) during the observance of the Society's 75th. anniversary. This important reference work, compiled and edited by Greta Kessenich, is a collection of significant articles gleaned from 75 years of this Bulletin. In the compilation of this work, Don served as editor of the chapter on hybridization (4). This is a long chapter containing articles by a number of authors who cover a wide range of hybridization topics. The chapter ends with an interesting section on propagation. Don, himself, is the author of five articles in the chapter. In addition three more of his articles are included in the chapter on culture and diseases in which he discusses fertilizer (p74), diseases (p84) and nematode infestations (p88).

A number of peony hybridizers are aware of Don's generosity. Not only does he patiently take the time to discuss problems confronting the novice and the more advanced breeder, but he has been willing to share divisions of valuable hybrid and lactiflora plants and to contribute seeds and pollen to their breeding programs. This sharing can be a very important factor in a breeder's life as he attempts to create new and improved varieties.

He has been instrumental in reviving and modifying Professor Saunders' techniques (5) of storing peony pollen and of testing the viability of pollen (6). Knowing whether or not a given pollen is viable can save valuable time in the field since crosses using non-viable pollens can be held to a minimum or avoided entirely. The proper storage of pollen from one season to the next allows crosses to be made on early blooming varieties with pollen from varieties which bloom later in the season. The use of stored pollen is a particularly valuable technique when checking the effects on the progeny of reverse crosses.

Another technique which he has developed into a valuable procedure for the breeder is the controlled germination of peony seeds (7). This procedure is a modification of an earlier method devised by Roy Pehrson (8). Anyone, who has tried to germinate peony seeds in the garden and has experienced the frustration of

waiting a year or more for the seeds to germinate if indeed they do, can appreciate the advantages of controlled germination indoors. The method is particularly suited for seeds from difficult hybrid crosses in which viable seed set is discouragingly low.

From his writings it seems safe to assume that one of Don's special interests is hybridizing. His successes with hybridizing peonies has placed him in the ranks of our leading peony breeders today. From his descriptions of his crosses and results, it is obvious he is a meticulous record keeper. As a foundation for his work, he has made a thorough study of the voluminous hybridization notes left by our best known breeder, Professor Saunders. It, therefore, seems especially fitting that Don should be awarded the Saunders' medal. For a running account of his thoughts on hybridizing and the progress he is making, interested readers should consult the back issues of *Paeonia*.

Those who have attended the A.P.S. National Exhibitions in recent years have been able to see some of Don's creations first hand. He is among the few in this country who have succeeded with the Itoh cross. Two of his Itoh hybrid seedlings (#205 and #206), which have been shown, are particularly stunning and appear destined to be winners in this class. At the 1984 Exhibition he showed several of his interesting herbaceous hybrids on the seedling table. It seems certain that their appealing colors are just a sample of what can be expected in the future.

The future is here for some of Don's creations since six of his hybrid were registered in the September Bulletin (9). The era of the Hollingsworth Hybrids has arrived. Although a number of peony hybridists may already be familiar with some of his varieties and, because of his generosity, may even have divisions, these varieties will not be available to the discerning gardener. We are confident of this since he sent out a list of peonies which included four of his registered introductions and which he made available in September 1984.

Readers of this Bulletin are familiar with the fact that he has served on the Board of Directors of this Society for a number of years. His contributions in that capacity have been extremely valuable for the progress of the Society.

There seem to be few aspects of the peony and its culture which have escaped his attention. This article has been an attempt to highlight some of his contributions and the inscription on Don's gold medal aptly summarizes them: Accomplished Hybridist; Tireless Donor of Seeds and Plants; Prolific Writer. The Saunders Memorial Winners of the past were listed in the Bulletin for September 1983 (10) and it is with great pride that we add the name of Donald Hollingsworth to that list.

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- (10) Dewey, L.J., A.P.S. Bulletin no. 247, pp 16-19, September 1983.

A trip to the National Convention

Neville Harrop, Newtown, Tasmania, Australia

After arranging our overseas trip from Australia to coincide with 15, 16 and 17th of June at Mansfield Ohio, my wife, daughter and I arrived at Roy Klehms on the 10th. He and his wife just could not have made us more welcome, their kindness and time devoted to us was overwhelming. Roy is one of the kindest men it has ever been my good fortune to meet. His herbaceous peonies were in full bloom when we arrived but unfortunately for me, his tree peonies were virtually finished. We started at his one year old herbaceous acres and progressed through the two year old acres, on to the three year olds. This was an experience in colour and loving attention which will stay with me for the rest of my life. Roy then capped off our stay with him by taking us into the car rental people in Chicago and pointing us in the direction of Dr. David Reath in upper Michigan. My initial attempt driving on the "wrong" side of the road certainly didn't earn me any friends and converted my wife and daughter from normal humans into gibbering crones.

The drive to Davids through lush vegetation of Wisconsin into Michigan was most pleasant, particularly N.E. Wisconsin. On arrival, David and his warm hearted wife also greeted us with the amazing midwest hospitality for which this area, I understand is renowned.

In between operating on animals, breeding ducks, organizing the field labour in his peony acres and going out on veterinary

rounds, he still managed to devote the majority of his time to me whilst I was there. His knowledge and scope of coverage, particularly of tree peonies both in varieties and hybridizing, put over in such a diffident manner was most impressive and educational.

From Davids we drove to Mansfield, arriving on the evening of the 14th June, dead on schedule. The road signs in Illinois and Michigan throughout, we found descriptive and easy to follow but from the time we crossed the border into Ohio, confusion reigned. We suspect a rather nasty sense of humor in the Ohio authorities and are convinced they have rationale unique to their state.

After finally arriving at Mansfield, wild eyed and our confidence shattered, we were fortunate to find Mr. Edward Michau (A.P.S. President) booking into the hotel at the same time. He introduced himself as soon as he heard our funny accent. A quiet gentleman with plenty of fun in him. He took us under his wing and introduced me to the vicissitudes of a national peony festival.

We went out to the workroom mid-morning of the 15th where I made myself useful by filling hundreds of water bottles. When 2:00 p.m. and still no one arrived, Ed was getting concerned but by 3:30 everything was in full swing with Gus Sindt, Big Bob Schmidt and Chuck Klehm preparing or discarding what appeared to be thousands of blooms John Simkins and wife then appeared with their tree peonies and proceeded to unpack and prepare in a swash buckling manner in contrast to their rather tense and serious contemporaries.

By 7:00 p.m. the work room was spilling over into other rooms and every one working flat out, in what to the initiate appeared to be total confusion but was in fact organized confusion.

It was fascinating to actually see blooms transformed from dehydrated crumpled buds into gentle compositions of glorious colour right before your eyes. Gus Sindt illustrated this to perfection with some of his single Japs. As soon as he removed the bags, the buds literally sprang open in an explosion of colour.

About 10:30 everyone called it a day in anticipation of a 6:00 a.m. start the following day.

During the afternoon, Greta Kessenich arrived and was immediately in the thick of it, helping with problems, reminding people of requirements, meeting old friends and introducing new people, all with complete aplomb.

I didn't arrive back at Kingwood Centre until 9:30 a.m. when all blooms had taken advantage of the nights respite to preen their ruffled petals.

It reminded me of an ants nest with the competitors commuting to and from the work rooms to the exhibition hall with their final selections, one in each hand, back and forth. All was ready just on

time for the deadline. Herbaceous peonies of all types beyond description and far superior to anything I have ever seen. Not being a grower of the herbaceous, I won't attempt to describe the various varieties, however DINNER PLATE and CORAL CHARM stick in my mind. I was honoured in being invited to participate in the judging, which was carried out in a most professional manner. Big Bob Schmidt's entry, a massive globe of soft pink stole the show by winning the Grand Champion, altho it was hotly contested by many others.

The tree peonies, unfortunately had seen their full flash some weeks previously and therefore it was not possible to display the best bloom. Although there was a fair coverage of the Lutea hybrids, very few *P. Suffruticosa* (My favourites) were entered and most of them were rather small.

This exhausting two days was capped by cocktails and a banquet at the end when I had the opportunity to discuss our favourite topic with American experts including Marvin Karrels, a man with a wealth of experience.

This trip is greatly recommended to those who may be wavering, irrespective of their experience. It was educational, satisfying and a convivial experience only exceeded by the friendliness and help extended to us by all members.

Thank you, everyone.

REGISTRATION

WINE ANGEL (V. Christenson) Introduced by Rogers, Sherwood Oregon. August 27, 1984

First bloomed 1977

Japanese type. Erythrite purple blended with heliotrope rose. 24 inches in height, flowers 10-12 inches in diameter. Early midseason bloom.

Registered by Roger, Sherwood Oregon.

Garden of Mr. and Mrs. John Simkins, Oakville, Ontario, Canada

Mr. Simkins is past president of the American Peony Society, also a member of the Board of Directors.

The main perennial in this garden is the tree peony. Mr. Simkins has written articles for the Bulletin telling how to use space between the tree peonies, so bloom would continue after the blooming season of the tree peony.

These pictures show bulbs and plants used for beautification through the summer months.



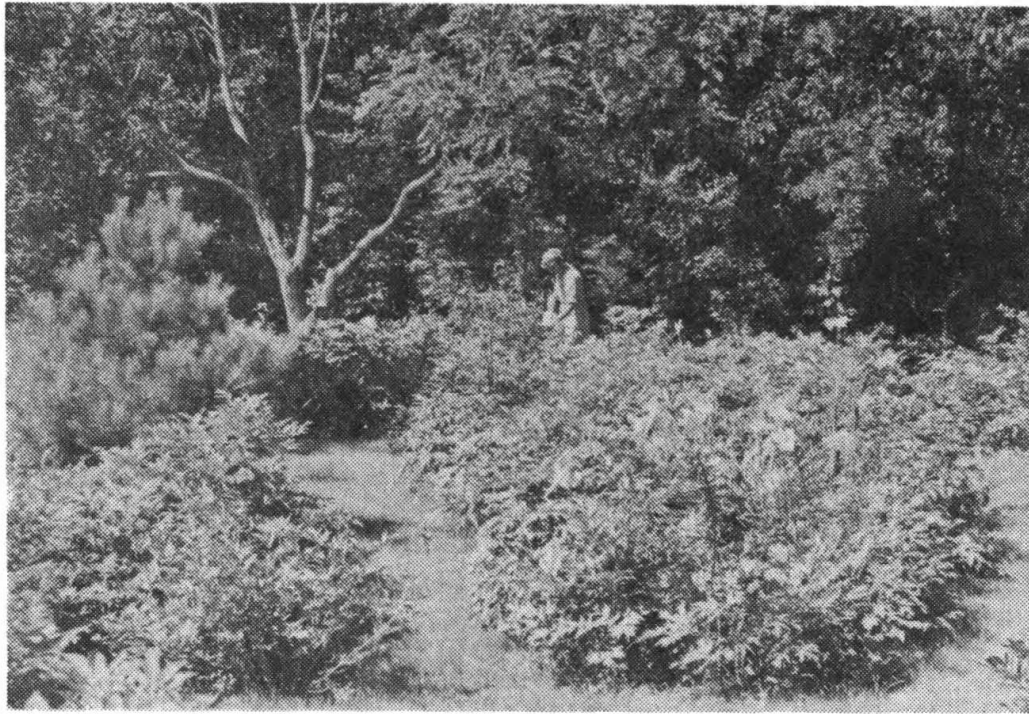
Front lawn garden in July with Klondike Lily in bloom over the Daphnis-Gratwick tree peonies.



Close-up of lilies in centre front bed.



Front side area in July with daylilies and rudbeckia in bloom among the peonies and the tiger lilies are in bud.



Overall view of the back garden Peony beds with some lilies in flower.

Garden complements home's interior

By John Simkins

The garden is an extension of the house and reflects the lifestyles of the family. This reflection is modified by the size and type of house, the size of the lot and the landscaping done by the contractor or the previous owner. As the garden is mostly living material it matures and changes over the years.

Our garden began as a sodded front yard in the fall of 1961 and has grown and changed over the years as the plants and children grew. This is its story and I hope that some of our experiences may be of use as your garden goes through a similar process.

The lot is one-half an acre and is pie-shaped being 90 feet wide at the street and about 300 feet at the rear. The landscaping plan was done by Sheriden Nurseries Landscape division and consisted of foundation and boundary plantings and an interest group of three birch trees on a three-lobed bed on the east front corner just inside the property line. This was a good location as the septic system made it a moist area. The clump of birch is still there.

The plan was followed over the years although some changes were made in the selection of trees and shrubs and width of borders for personal preference.

The plantings of trees and shrubs and perennials make a border about 10 feet wide along the back yard fences and provide privacy. On the front groups of trees provide a backdrop

for the flowers. The original foundation planting of meyer junipers hemlock, and a red hawthorn were removed after 15 years as they had outgrown their space. They were replaced with tree peonies which never exceed four feet in height. Foundation plantings provide a transition from house to ground and tie the house to the lot. They also break the sharp corners of the house, window ledges, steps and walks.

In the selection and location of trees their shade pattern is important. Dense trees like maples, lindens, catalpas and mulberry are best located to cast shade on the house, your neighbor's house, the street or the driveway. Lawn trees are best restricted to the smaller flowering types like Chinese lilac, Japanese cherry or the many flowering crab apples. Larger trees that cast light shade are the locust. I have two on the south side of the house to shade the house and patio without making the greenhouse too dark. As the driveway is close to the west boundary and the neighbor's house to the east, I have boundary plantings of maples, tamarak, osage orange, chestnut, mountain ash, locust, white pin, birch, and Japanese lilac.

The tree borders are underplanted with honeysuckle, spirea, mock orange, althea, lilac, magnolia, viburnum and hydrangea. In front of the shrubs are perennials mostly peonies with hosta, day-lilies and pachysandra planted in the shady areas.

There are more plants that grow in this climate than we can hope to put in one garden. The selection can be made in many ways: personal likes and dislikes, ease of maintenance and type of soil are a few. The two extra considerations I think improve the balance in the garden are to try to plant one or two impact areas and to try to have something flowering in the garden throughout the season.

The major impact flowers are the tulips and I plant a 1,000 sq. ft. bed with 500 yellow Darwin hybrid tulips. Other mass plants could be a bed of geraniums or any other colorful annual.

Shrubs that provide impact are forsythia, magnolia, rhododendron, azaleas and viburnums. These catch the eye from a distance and raise the spirits. They can be planted singly or massed, the latter achieving best results if room is available.

Being a tree peony specialist, I use these as mass plants, growing around six hundred in island beds on the front lawn and an equal number behind the house. If the whole group flowered together it would be more spectacular.

The idea of having something flowering all the time provides variety. This makes a walk in the garden interesting as you expectantly wait for the various plants to flower. As the season advances it becomes more and more difficult to find perennials and shrubs that flower late and this provides a challenge. In your travels you are ever watchful for plants that flower in your "gaps."

While the search is on, the annuals fill in all the spaces and flower from spring to fall if you remember to remove the dead flowers. I also try to do this on most shrubs and perennials.

Many people ask about the maintenance of such a large number of flower beds. We weed all the beds in May to remove early weeds and grass. This takes at least a week. Then we add a mulch of wood chips, bark and grass clippings. As the peonies and other plants grow they shade out most of the weeds and hide the spring bulb foliage. For the balance of the season no concerted effort is required but the few weeds seen in daily walks are pulled out.

Behind the rear garden area various methods of vegetable gardening are tested in 13 raised 4'x8' beds, eight inches high. One has two varieties of peas and lettuce, spinach, endive, carrots, radishes and beets growing in short rows. Another has a covering of black plastic with eight tomatoes, one in a Wall-O-Water. Another contains about nine different shasta daisy varieties, some lutea foxglove, English delphiniums, lupins and a few other perennials for testing. One bed contains some rows of the new Sweetheart strawberry grown from seed along with two-year-old magnolias grown from the seed of my present plants.

One section of this area is used to try the Lexigrow method for growing squash and cucumbers. This uses black plastic to keep the soil warm and keep down the weeds while the squash is growing in a 10-inch diameter by 24-inch deep holes of potting soil located at each corner of the five foot square plastic. Along the side are hills where these crops are grown in the normal way for comparison. The results of this testing are included in the bi-weekly "In Your Garden" column in the Beaver and other Metroland papers.

John Simkins is an Oakville resident and garden columnist for the Oakville Beaver.



SEED DISTRIBUTION PROGRAM

Here is the list of our new crop of peony seed. An outstanding selection, some carefully hand pollinated for producing the hybridizers dream. All are special hand picked pods containing seeds from varieties of merit. Peony seeds are free for the asking. Do send money for postage and packaging \$1.50 for USA and Canada and \$4.00 foreign. Chris Laning 553 West F. Ave., Kalamazoo, Michigan 49007.

From Gus Sindt

1. Pico - White single
2. Vanity - blush Jap
3. Florence Bruss - red single
4. Patricia Hanratty - pink Jap
5. Rose Bowl - light pink single
6. Carrara - white Jap
7. Terry Gruden - red Jap
8. Dawn Pink - single
9. Bonanza - red double
10. And a few seeds of the following: Moonrise, Hazel Brand, Husky, Friendship, Cousins 72-11

From Marion DeReamer

1. Lotus Queen - white jap
2. Walter Marx - white single, tall
3. Mixed lactiflora

From Chris Laning

1. Sanctus x Silver Dawn F3
2. Tetraploids from pink & yellow clones
3. Quad F3 x Silver Dawn F3
4. The F2 from Roy Pehrson's "Best Yellow"
5. Vista x Archangel
6. Serenade F3
7. Quad F3 x Moonrise
8. Red Stripe - lactiflora with red and white striped flower
9. Lactiflora mixture

From Don Hollingsworth

1. Early Pastels Hybrids, better form, open pollinated
2. Early Pastels, fair form, open pollinated, tetraploid
3. Little Reds Hybrids (Good Cheer, etc.) and their seedlings from interbreeding, tetraploid
4. Peregrina, Lobata species (3 clones), tetraploid
5. #870, veined and flared red/purple over ivory, seedling of May Music x Light Pink Quad F2, tetraploid
6. #1423, seedling of Roy's Silver Dawn F3, veined and bordered delicately in pink over white, tetraploid.
7. #1420, Roy's Silver Dawn F3, delicate ivory with lavender points and hint of border. "Points" refer to filaments and stigmas
8. Mixed Suffruticosas
9. Mixed lactifloras

From Toichi Domoto

Tree Peony Seed

Garden of Don Jenkins

Brevard, North Carolina

There is a place in the western North Carolina mountains that is ablaze with bloom of Rhododendrons, Azaleas, Camellias and the tree peony, in the spring.

This scenic garden, large in scope, is in the city of Brevard, elevation 2200 feet and here lives Don Jenkins, manager of the Brevard Lumber Company.

His hobby and interest is growing these plants. He maintains a greenhouse for the more tender varieties of Camellias which are tubbed and housed there for the winter. The weather chart shows the temperature is rated at -5°F. but the record cold was -24°F. The rainfall averages 66 inches per year with 4350 heating days normalis and 700 degrees cooling days mormalis. The soil is acid.

The tree peony is planted deep, with graft union 6" to 7" below the surface. When planting, a hole is dug 2 feet deep, 2 feet in diameter. The replaced dirt is red clay from the hole, compost and sand. The plantings are in a little shade with the height of these plants varying from 2 ft. to 3½ feet. They start blooming around the middle of April to mid-May. Mr. Jenkins states that this area is not conducive to growing tree peonies as they require more attention than more favorable areas. He has been growing tree peony for many years, his first plants were bought from Mr. Gratwick, when he was in the commercial business.



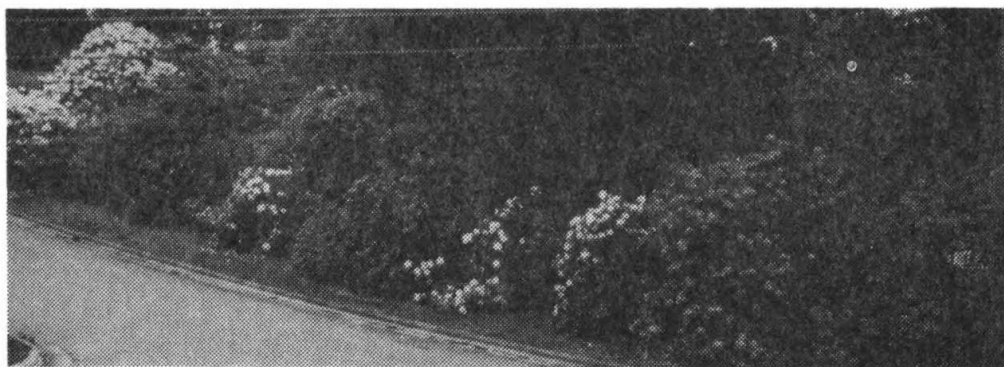
Captain's Concubine



Dark of the Moon



Rhododendrons in group

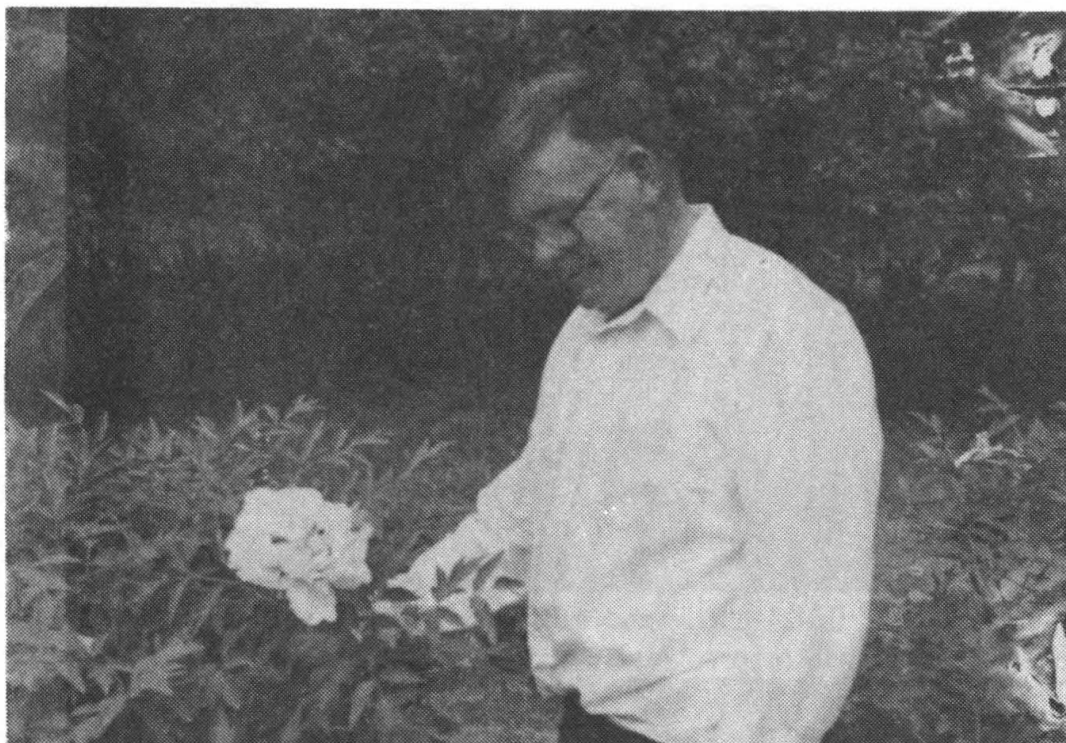


Rhododendrons along Rice Street



Gauguin

Photographs - Don Jenkins.



**David Reath and his semi-double "Rocks".
Photograph by Neville Harrop, at Vulcan Michigan.**



**T.P. #D-282 growing in the garden of Don Jenkins Brevard,
North Carolina.**

Photograph by Don Jenkins

BILL OF ALL TRADES - MASTER OF MANY

by Peter E. Hughes

Halley's comet visits us every seventy-six years. With a life span of three score years and ten, many of us do not witness its visit during our lifetime. Of those who do, many were too young to remember its visit seventy-five years ago, and many will be too elderly to be aware of its impending visit. Few people indeed witness two such visits whilst retaining their good health, so as to appreciate seeing this rare event twice. I have met and stayed with such a man - Bill Gratwick.

In August this year I left Australia for a stay in the United States, and on the way to the east coast I broke my journey at Chicago and again enjoyed the wonderful hospitality and delightful company of Sarah and Roy Klehm and Eleanor and David Reath. At the end of that stay, Roy and I went to Pavilion, N.Y., where we were most cordially received by Bill.

The Gratwick estate is set in four hundred acres of lush, rolling New York countryside. The house was a hive of activity. Bill's daughter from Vermont and some of his grandchildren were visiting, and extensive restorations to the homestead, after the tragic fire of 1973, were in progress. The estate must have been magnificent in its heyday, when it employed thirty people. Evidence of its past grandeur and present serenity is everywhere.

Bill was taking an active part in the restoration. Apart from the wing which had been destroyed entirely, the remainder of the mansion had been re-roofed, and after extensive remodelling using many of the original doors and windows, much was being replastered.

After consulting a veterinarian about one of his horses, Bill showed us around, pointing out the pre-1914 swimming pool, the circle of peonies with the Saunders Chair, the original plants of GUARDIAN OF THE MONASTRY and COMPANION OF SERENITY, the dwarf village and a rare type of weeking Fagus. We were accompanied on this tour by Emile, an enormous, agile dog.

Roy collected scions of some choice varieties and when we had lunch at the home of Bill's daughter, Lee. While Bill was having a brief rest, Roy and I spent some time with the peonies and collected scions of rare varieties. As we left, Bill issued a most cordial invitation to spend time with him and I availed myself of his kind offer, in late September.

Bill met me at Buffalo airport. As he drove home, we chatted on a variety of subjects. I learned that CHONI was distinct from ROCK'S VARIETY. It was a pale lavender color with flares; not

as hardy as ROCK'S, and as far as Bill knew, was now lost to cultivation.

This time no work was in progress at the house, but tools, including a power saw, were evident. Bill told me that he had been working the previous day constructing a seat in a restored bay window. He was using timbers from the original home and was morticing the joints with the precision of a cabinet maker. He was justifiably proud of his work.

He showed me to my room, told me to make myself at home, and as neither of us was hungry, he told me to look around whilst he took a brief rest. He suggested that I look in the as yet unrestored library. Many of the books were still in crates, but the great breadth of his interests was clearly evident. Books on Music, Art, Animal Husbandry, History and almost any subject abounded. It seemed rather incongruous to find CHAIRMAN MAO next to HOW TO MAKE A MILLION DOLLARS. Nearby were old musical scores, and Bill later told me that he had participated in Gilbert and Sullivan productions.

Bill is a rare mixture: taciturn and attentive, and yet very communicative when asked questions. I enquired how he became interested in boxwood hybridization, which has led to his meeting Professor Saunders, and he told me that he had had a small nursery. He is a member of the Class of 1925 at Harvard, graduating in architecture. He then proceeded to engage in Landscape Architecture, hence the interest in hardy boxwood plants.

Then we attended to his horses. He has been breeding Holsteiner - Thoroughbred crosses and they are now in the fourth generation. He likes the temperament and bone strength of the Holsteiner, which he finds very dominant, and is breeding horses for dressage. He knew each horse individually and singled out three for an oats and vitamin supplement. The horses were beautifully cared for and obviously had been reared and handled with great sensitivity.

Next, we saw his sheep which he was breeding for brown and black wool. He had used four breeds in his breeding. He had two rams with those beautiful curled horns which I associate with Australian merinos.

Then came the peonies. He knew all his Japanese peonies by the numbers he had allocated them upon receipt from Japan, pre-1939. In 1938, '39 and '40, he assessed each variety as A, B or C, according to its performance. Readers may be interested to note that he rated the popular variety KAMADA FUJI as C. Bill obviously does not bow to popular opinion.

He feels there are too many varieties commercially grown and has reduce the number of varieties he grows. He told me to view with suspicion any nursery who charged the same price for the pink Moutans as for the red-flowered varieties, because the red

ones were much less vigorous and harder to propagate. From my own limited experience, I could not agree more.

His most vigorous red was one of his own raising, RED RASCAL. Roy had taken scions of this variety on a previous visit. Bill has plants of many other reds, but said that most grew poorly. J. 64 ADJUMA - KOGAME was said to be a beautiful color but a poor grower, and this was evidenced by the three plants he showed me.

I saw the group of plants, raised from seed which Bill imported from Japan pre-war: COMPANION OF SERENITY, GUARDIAN OF THE MONASTRY, CAPTAIN'S CONCUBINE, RED RASCAL, his as yet undistributed MISTRESS OF THE MONASTRY, and two splendid pink and white varieties from which he was not yet given such poetic names. All looked wonderfully healthy. At our previous visit, Roy Klehm took scions of these varieties.

Bill does not think very highly of most of the maroon Moutans as he feels they lack vigor, including his own DARK OF MOON, but feels HORAKUMON J. 307 was splendid, and spoke most highly of the pink variety SHINTENCHI J. 39.

The CAPTAIN'S CONCUBINE is said to be the most perfect cupshaped peony grown, and I asked him about the story that he had vowed never to release it after a visitor criticised its name. He laughed, said it was not true, but did not elaborate on its name.

He seemed very intersted in white Moutans and apart from his own white variety, praised GESSEKAI J. 31 and SUISHO - HAKU J. 102. He pointed out this last is a parent of the splendid Daphnis hybrid, ZEPHYRUS D. 204, which is now in commerce. He has several plants of GENKIMON J. 4, which he initially rated very highly but of later years found somewhat disappointing until it redeemed itself recently. He said he had inadvertently lost two white varieties and was very anxious to reacquire them. They are WHITE QUEEN J. 44, which he said was just like a big white tulip, and NAGOYA, a single white, just like huge white poppies.

The Saunders varieties all looked fine everywhere - around the Saunders Chair and scattered around the estate. Bill was particularly impressed with the vigor and habit of ARCADIA and spoke highly of HIGH NOON. Many of these plants were in beautiful settings with graceful mature trees and his own sculptures with water continuously playing upon them.

Most of the Daphnis hybrids had been more recently transplanted, with some losses. He told me of how he came to be associated with Nassos Daphnis through their mutural interest in art. Of these varieties, IPHIGENIA D. 303 and ARTEMIS, named after Nassos's daughter, seemed outstanding. I have seen D. 303 growing at Roy Klehm's, David Reath's and in Australia, and ARTEMIS at all the above and at Neville Harrop's garden in

Tasmania. Their vigor is outstanding. D. 303 is a beautiful red and ARTEMIS has a unique silken sheen to its single yellow flowers. The stem may be a little weak on young plants, but as soon as it gets established it is superb and should be in every collection. Furthermore it is readily available.

Bill takes great pride in the latest Daphnis creations - D. 365, D. 367 and D. 368 are said to be truly outstanding. Nassos told me that D. 367 took ten years to bloom. One is an excellent yellow and another a dark purple with almost black flares. Once again, the scions that Roy Klehm is propagating will ensure their survival.

One morning we mapped a row of plants, planted the previous year and propagated by Roy (mostly) and David. All looked wonderfully healthy.

Bill was a most considerate host and lit a fire in my bedroom each night. He gathered fresh vegetables from the garden and did the cooking. Unobtrusive, thoughtful action, no doubt the result of his upbringing, continued to filter through. He showed me an autobiographical sketch of various incidents and interests, which showed amazing self-insight.

He had intended to write a book on peonies, but lost most of the material in the fire. He kept meticulous records of his peonies and still has well-filed notes of his plants and all the Daphnis's breeding records. He is an amazingly alert man for his eighty-one years, and looks forward to this year's crosses blooming in seven years' time.

Bill's personality has many facets: reticent yet communicative, transparently honest, forgiving in the extreme - he holds no malice against a nurseryman, now deceased, who purchased an exclusive collection of his best varieties and then refused to pay, as he could obtain plants bearing the same names from Japan at a fraction of the price - he is modest of his Saunders Medal, and extremely knowledgeable and talented in many fields.

Despite adversity, caused principally by the 1973 fire, he has come to terms with his environment and leads a secluded but full life, enjoying his many interests. He has those rare qualities of being devoid of malice and virtually non-materialistic. He has truly learned to appreciate life in his typically iconoclastic way.

Color Slide Collection

The American Peony Society maintains several groups of excellent sets of peony slides for rental. Each set contains 80 slides. A complete set can be requested of all tree peonies, herbaceous hybrids, or lactifloras or a combination of these three types.

Return slides promptly. Return postage, including insurance, must be paid by the renter. Insurance \$50.00. Rental Fee, \$7.50.

Send request and check to Greta M. Kessenich, Secretary, 250 Interlachen Road, Hopkins, Minnesota 55343.

About Tree Peonies. . .

by Takahiro Somei, Japan

(translated by Ron Ringdahl, Seattle, Washington)

1. Bud Sports in Tree Peonies

Bud sports resulting in variations in flower coloration are known to occur in azaleas, plums, camellias, and other plants. In the case of the tree peony, however, it is not differing coloration but a differing flower form which arises from bud sports. This is known to occur, however, only in plants established for many years and never is found in young plants.

2. Winter-Blooming Tree Peonies

Though definite references are lacking in the early literature, it seems that the winter peony came into popularity during the eighteenth century. They were originally selected and grown to provide cut flowers for the celebration of New Years. But in recent history, with the influence of stringent war-time regulations, for example, not to mention difficulties of propagation and other factors, growers began to lose interest in them, nearly bringing about their demise. They have until recently been raised and preserved by just a small number of hobbyists and a number of varieties have been lost. Lately, however, the value of the winter peonies has begun again to be recognized, and growers are propagating them now as quickly as possible to fill increasing demand.

This winter-blooming peony does not refer to a peony forced to bloom in a frame or other such contrivance, but indicates a group of varieties which bloom naturally during the winter in ordinary exposed growing conditions. Among peonies they are true eccentrics, blooming at a time when conditions (temperature and length of day) are completely opposite those required by the normal peony in order to bloom. Compared to the normal spring-blooming peony, it has the characteristics of being active while the temperature is low, having a short period of dormancy, forming flower buds quickly, etc.

The blooming period of winter peonies is from late November until late January. The flowers do not bloom all at once, but randomly one by one throughout this period. With the coming of spring, particularly vigorous specimens will bloom again, this time four or five days, or perhaps a week, earlier than the ordinary spring-blooming varieties. Varieties belonging to this group include: "Taishoko", "Kurikawa-Beni", "Hi-no-Mihata", "Kinno", "Yuki-Gasane", "Kanjishi", "Hojoko", "Shiguregumo", "Shiki-no-Sato", "Fuyugarasu", "Nisshoko", and others.

An additional small group of winter-blooming varieties bloom before the full blast of winter cold, any time between late October through December. Varieties in this group include: "Kanzakura", "Shutoko", "Chiyo-Nishiki", and others.

DON'T NEGLECT THE BASICS

by

Anthony De Blasi, West Newfield, Maine

Recently, on the news, I heard of an abandoned silver and gold mine where people suffering from arthritis spend time sitting--some dangling their feet in the waters--and leave feeling much better. Perhaps the thought of gold and silver possibly still lurking in the walls of the cave, while they relax in that dim and mysterious atmosphere, evokes that yearning which Leonardo Da Vinci says is the essence of life. Or soothes them in the subtle ways that pale pink walls are said to subdue violent impulses. Of course, skeptics say there is no proof that the mine is effective in treating arthritis. But the 8 out of 10 visitors--including doctors--who leave their aches and pains in that mine don't need any proof other than that it works. **It works.**

This reminds me of the bumblebee who doesn't know she is aerodynamically unfit to fly, so she flies anyway. Or the African violets that, ignoring the fact that fish emulsion does not have the proper N-P-K formula, flourish when fed the stuff. Bumblebees and African violets trust nature to allow them to be what they ought to be. With people it's different; they prefer to dissect and analyze nature, to see what makes it tick, so that they can make it tick better.

Such as trying to identify a virus that is plaguing a group of peonies, in order to deal it a **specific** countermeasure. That the genetic code of a virus can fill a book--that of a bacterium 8 books--does not seem to bother those that like to tinker with nature's "mechanisms". Our ancestors, less sophisticated if not less enterprising, managed to grow things well with a small fraction of our "knowledge" and horticultural products. Their success was rooted in the dynamics of good culture. Good, deep soil, kept rich with compost, dried blood, ground bones. Generous spacing, to let in air and sunshine. Regular cultivation, to check weeds and keep the soil in tilth. Deep watering in times of drought. Did such practices bring forth fine perennials? And how! According to their state-of-the-art, the condition of the plants was a direct result of these natural factors. If things went wrong, it was because something was wanting in their culture, which was then corrected. Their system needed no further justification than **it worked.**

It still works. Healthy organisms ward off disease and insect pests. Why this is so is not clear in all the details but makes sense considering a natural scheme that favors the constant flux of protoplasm from one mold to another. Little fish develop the agility for devise schemes to escape being consumed by and becoming bigger fish. Plants, likewise, are not helpless and waiting

for **us** to save them from the thousands of insects and billions of pathogens with some trick of ours.

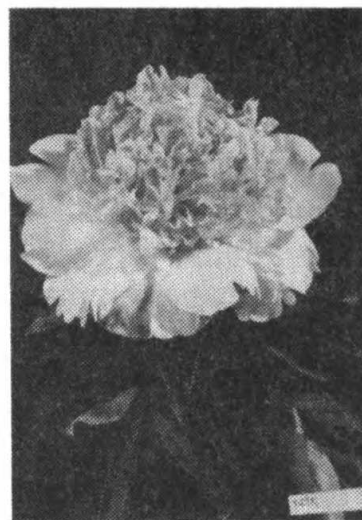
We don't need to use dried blood, which is expensive these days, or grind bones--two ingredients in nature's vast recycling program. But good soil, plenty of space and light, ample water and regular cultivation still works to produce fine, healthy plants. With plants in pots and in the garden, **we** provide the basic factors of growth. Have we paid serious attention to **these** details?

I was once told that a potted lemon tree I had was chlorotic. "It needs chelated iron" was the diagnosis. To me the yellowish leaves indicated that I was doing something **fundamentally** wrong. What it suffered from in one word was **neglect**. After watering it right and feeding it regularly, the leaves turned green and the plant responded with enough lemons to make 10 lemon meringue pies.

Before we spend time, effort, and money finding a specific cure for a specific symptom, it might be better to concentrate on the basics of culture first. Plant them right; grow them right; nurse them back to health if they haven't been treated right. If we are satisfied that we have really done everything we ought to do in this department, then we may proceed to the next step, which is to decide if the plant(s) we have that are not responding to good culture should be discarded. Then, if we must keep the ailing pet(s), may we justifiably turn to chemical and biological counter-agents in a last ditch effort.



Pink Parfait



Raspberry Sundae

Some Thoughts on Soil

Eldred E. Green, Horticulturist, Chicago, Illinois

The last two issues of the Bulletin have carried an article on soils by Mr. Fizzell of the Illinois Agricultural Extension Service. It is interesting to know this service has discontinued the testing of soils. This was done for many years at a nominal fee. Now, soil testing is referred to commercial labs with prices in the \$10 and up range.

While the Extension Service suggests having soil tested, it recommends using a balanced commercial fertilizer such as 5-10-5. In short the soil test is ignored. The reason they suggest it is to save face. Soil tests never were accurate enough for the ordinary person. To be accurate the tests would have to include five separate tests for soil nitrogen- some of these are time-consuming and quite expensive. Tests for phosphorus and potash are relatively valueless as an excess of these minerals merely results in a build-up in the soil that is rarely harmful. Mr. Fizzell pointed this out very clearly. So a soil test is merely an indication, frequently very inaccurate, of the potential minerals in a soil. Whether these become available depends on bacteria, moisture, temperature and other factors that vary from day to day. So play it safe. Use a balanced fertilizer that is about 10% nitrogen and you should have few problems.

Another point that is unknown to many, is that potash use by plants seems to depend on fungus activity in the roots. This aspect is currently being investigated by several institutions. The fungus is found in the roots of woody plants (herbaceous haven't been tested yet) and feeds potash to roots from the surrounding soil. While the root-fungi have been known for years the role they play is not clear but the present research gives some indication.

Also this same research has shown that an excess of nitrogen used on soils, such as the 23-5-5 types for lawns, kills or injures the potash-gathering fungus (mycorrhiza). So the high power lawn fertilizers may be killing your trees and shrubs.

Another point in connection with soils is the reaction that comes from using humus. The increase in growth by adding humus is very often greatly in excess of the mineral content of the material. As reported in APS Bulletin of six years ago some forms of humus, notably alfalfa, have a substance that stimulates growth. Likewise peat has been shown to contain materials known as chelates that make minerals much more available. Both the growth-stimulator in alfalfa and the chelates in peat (and other humus) seems to be types of alcohols. In short there are many materials in humus that we are just beginning to discover. Maybe grandma and her tea water for plants was far smarter than we realized.

Another trend in recent years is to use humus materials instead of soil. Many greenhouses buy bagged products such as Pro-Mix which are peat products fortified with some perlite and minerals- no soil. There are clean, easily handled, free of worms and other pests and can be stored for long periods. However, like all organic materials they do break down so that long periods in a pot or bench will result in a shrinking and faster frying of the material. For pot plants that flower and are discarded they are excellent. Of course, soilless mixes must have some material in them like perlite to prevent soginess.

Along with the subject of soil tests is the one of soil acidity. In 1890 Henri Correvon who operated an outstanding nursery of alpine plants in Switzerland discovered that plants from limestone crevices grew better in pure sphagnum moss- one of the most acid of plant materials. He repeated this with the same results. In short, all plants grew well in a strongly acid soil while many would not grow well in alkaline ones. This research still holds. Avoid lime if you wish to avoid troubles. Even in strongly acid soils such as peats, use lime sparingly, if at all. Remember lime is also a needed chemical for plant growth and may be lacking in acid soils so adding lime in such soils may be beneficial as a fertilizer but unneeded to change the soil pH.

Correvon's conclusion that soil reaction was an alkaline problem has been substantiated by the widespread use of peat, peat mixes, and peat pellets. All kinds of plant are grown in these acid materials without trouble.

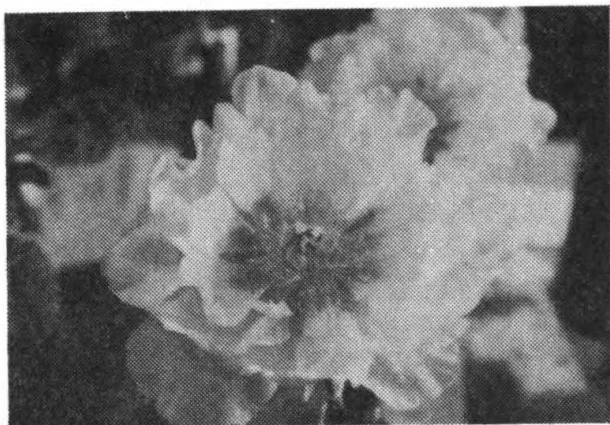
So the more we know about soils the more we realize how little we do know. This is where horticulture becomes an art and not a science. And the plants themselves add to the confusion. How do you grow a plant that is found on dry sandstone or sandy hills and also in peat bogs? Or one that is found on alkaline soil and also in acid swamps? Or ones that grow in pure humus or in pure sand? As I live close to the famous Indiana and Michigan Dunes I am impressed that by the great diversity of plant life that grows on this extremely pure fine sand. Where do they get their minerals? I don't know. And incidentally when I try to grow some of these I am using pure sand. It works.

So soil is a subject that will keep us puzzled for some time. Try different methods. What works for you may be disaster for someone else. And so far as peonies are concerned, my experience indicates that drainage and not the soil itself is a major factor.

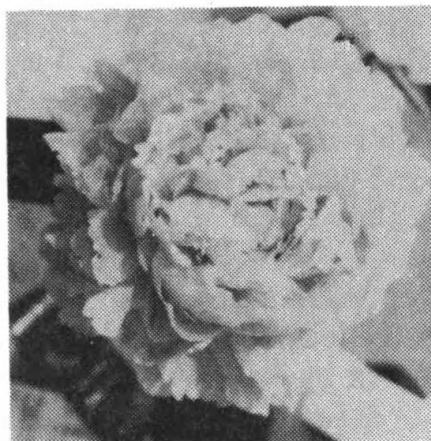
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NATIONAL CONVENTION 1985

Klehm Nursery, Champaign, Illinois



Yellow Crown



Pillow Talk



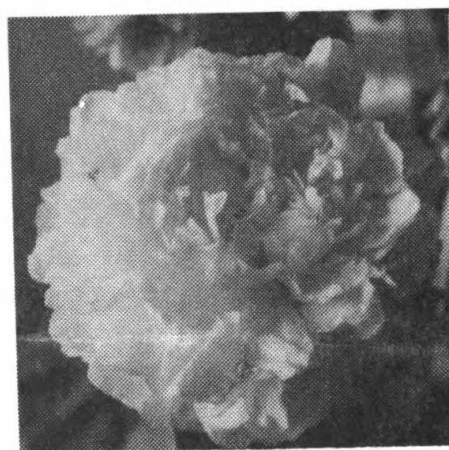
Princess Margaret



Bonanza

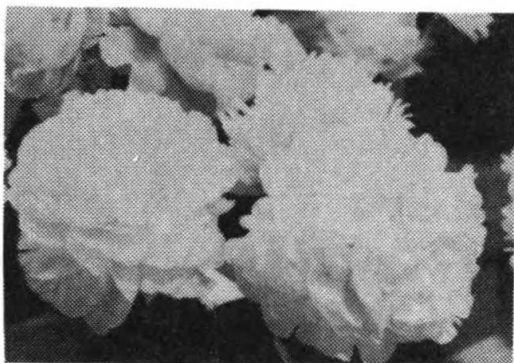


Karl Rosenfield



Norma Volz

Photographs - Edward Lee Michau



Sylver



Dignity



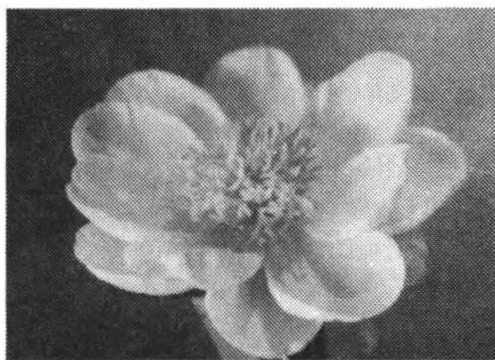
Coral Charm



Kay Tischler



Dawn Pink



Spellbinder



**Tenuifolia Ruba Plena
(Fern Leaf)**



ZuZu

**Photograph, Fern Leaf, Marion DeReamer
other photographs - Edward Lee Michau**

PEONIES AND THE UGLY DUCKLING

Dr. Thomas J. Delendick

Taxonomist and Curator of the Herbarium, Brooklyn Botanic Garden

Not long ago I picked up an issue of the *AMERICAN PEONY SOCIETY BULLETIN* and read an article which began, "Peonies belong to the Buttercup Family, or Crowfoot Family, or Ranunculaceae. . ." (Halas, 1983). With a sense of dismay I thought, Good grief! Didn't anyone tell the peony people? Why is it that the people who are closest always seem to be the last to find out?

The fact is that, since the 1950's, the peonies have been treated as constituting their own family, the Paeoniaceae. And their affinities are no longer with the Buttercup Family, the Ranunculaceae!

The change had been a long time in coming. Awareness of the differences--and their significance--had been growing despite the features peonies and buttercups, et al., have in common. Both groups have a showy and conspicuous perianth (the cycle of petals and sepals) with the parts separate and spirally arranged and with numerous stamens disposed in tight spirals. In the flower each has several pistils which are free from one another and mature into follicles--non-fleshy fruits which split open at maturity along a single suture (though not all Ranunculaceae have this type of fruit). Both groups are predominantly herbaceous with long-lived, often woody, subterranean stems. Inclusion of the peonies in the Ranunculaceae was logical based on the information available in the 19th Century and was the view of the two principal systems of classification of that time, that of Bentham and Hooker (1862) in England and that of Prantl (1891) in Germany. They were followed by Rehder (1940) and Bailey (1949) in the United States.

But through the first half of the 20th Century, evidence was accumulating that matters were not quite what they seemed. People were investigating a whole range of features, both in peonies and various genera of the Ranunculaceae, that had not been looked at before--and many of these features were found to have greater phylogenetic significance (that is, they pointed out relationships more clearly and positively) than the more generalized ones used by Prantl, et al.

For instance, peonies have a clear differentiation between a calyx (the cycle of sepals) and corolla (the set of petals). In the Ranunculaceae, however, there is only one set of floral parts, regarded by convention as a calyx. (There is one exception, of course, that being *Ranunculus* itself, which has both calyx and

corolla.) Furthermore, a study of the internal structure (anatomy) of the petals of peonies showed that they originated as sepals which were modified over a long period of time, becoming enlarged, highly colored and petal-like. The petal-like sepals of members of the Ranunculaceae were determined, after similar study, to have originated as staminodes, stamens which are sterile, producing no pollen, and modified to serve the function of a corolla.

In peonies the calyx is persistent after flowering; it may still be found at the base of the developing fruit. Not so in the Ranunculaceae, again with a single exception--the genus **Helleborus** which includes the Christmas and Lenten roses.

The seeds of peonies have a fleshy outer layer, an aril, which is red and turns black at maturity. Whatever the fruit type in the Buttercup Family, the seeds are never arillate.

The pollen of **Paeonia** is distinct from that of the Ranunculaceae. Erdtman (1952), who worked within the context of the Engler-Prantl system, noted that "pollen morphology emphasizes the isolated position of **Paeonia**" within the Ranunculaceae. Wordsdell (1908), after exhaustive study, determined that the vascular anatomy of the leaf and stem of **Paeonia** is "wholly unlike that of the other members" of the Ranunculaceae.

Lastly, the chemical data relevant to peony's systematic position were summarized by Hegnauer (1969). Although he emphasized the need for broader studies, he noted as significant the lack of certain compounds (ranunculin, mognoflorin) in **Paeonia** which characterize members of the Ranunculaceae, and the presence of others in peonies (galloyl-tannins) which are entirely lacking in the Buttercup Family.

Of course it was a while before the significance of these anomalies was understood and appreciated. but in the 1930's and 1940's, E. J. H. Corner began his studies on the origin and development of plant organs--leaves, pistils, stamens, petals, etc.--and discovered a "hidden" or cryptic character which has since been recognized as having tremendous significance in assessing the relationships between major groups of plants. The particular character in question is the way in which the stamens are initiated from the embryonic tissue in the developing flower bud. In the early stages of development the petals, sepals, stamens and pistils originate individually as knobs or "buds" of cells (primordia) which differentiate in an orderly fashion into the organs to which we give their respective names. When there are many stamens, as in peonies, buttercups, magnolias and cherries, they may be initiated in one of two ways. Either the stamen "buds" develop first alongside the petal "buds" and sequentially initiate more buds towards the center of the flower (centripetal development);

or the initial stamen primordia first appear adjacent to the pistil primordia and develop additional buds towards the outside (centrifugal development). As more and more of the flowering plants were investigated, it was discovered that not only do closely related groups of plants have the same type of stamen development, but also that this feature characterizes major groups within the Flowering Plants. As a fundamental developmental sequence it is all but irreversible. The ancestral groups having once been channeled into one basic developmental route or the other, their descendants are unable to deviate from it without risk of upsetting their entire reproductive effort. Such a character is exceedingly valuable (and fairly uncommon) as a tool for systematics.

As you have probably guessed, peonies and the buttercup family (minus peony) follow different developmental pathways. The former are centrifugal; the latter are centripetal. Furthermore, all the other families associated with the Buttercup Family on the basis of a whole series of morphological features in the Buttercup Order (Ranales) are centripetal too.

Corner in 1946 had collected the relevant data which justified the separation of *Paeonia* as a seaparte family. His work also emphasized that the affinities of peonies were not with the Ranales but with a hitherto distantly placed order, the Dilleniales (a primarily tropical order closely allied to the Tea Order, Theales, which includes the familiar ornamental camellias, stewartias and franklinia). Since the taxonomic treatment by Camp (in Gundersen, 1950), there has been general unanimity among botanists in placing the Peony Family in the Dilleniales (Heywood, 1978; Cronquist, 1981; but not Hutchinson, 1973). There are few (such as Taktajan, 1969) who would go so far in emphasizing the distinctiveness of the Paeoniaceae as to set it apart in its own order, the Paeoniales. Nonetheless, Taktajan's Paeoniales has the Dilleniales as its closest relative. In any event, near the Dilleniales--by no means an inconsequential group ornamentally--they are likely to stay.

And so the peonies, like the Ugly Duckling, are "different" from their early associates. They were "brought up" with a crowd that ultimately proved to be a stranger to them, and only after trial and heartache were their real relatives made known.

But any analogy can be carried only so far. Perhaps a young swan is ugly in the company of ducklings. But a peony, whether among its own or amidst buttercups, anemones and columbines, remains a queen among flowers.

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My viewing of 'Peonies of Greece at the Museum of Natural History' New York City

by William Uhde, Connecticut

"The winding path of learning over three thousand years leads from herb - lore of ancient Greece to modern botany. Revered in both Western and Eastern civilizations since earliest recorded times, the peony was "queen of all herbs" to the ancient Greeks and "king of all flowers" to the Chinese. The Peony has been selected by the Goulandris National History Museum as a vehicle to illustrate this long sequence. This is the first paragraph of the brochure that was given us as we visited the Museum in New York City.

The exhibition concentrated on the species of peonies found on the Islands and mainland of Greece. The considerable number of species found there are attributed to the role Ancient Greece played as a trading center between Asia and Europe.

Species growing there are *Mascula*, *parnassica*, *Rhodia* and *Clusii*. The last is found on the Island of Crete. *Mascula* is

interesting because its growth habits may answer some of the questions about variability of species experienced by breeders purchasing roots from abroad. This species is not only found as a red single or double but in its single form is found to have white flowers as well. There are eight subspecies of this peony. It is found in damp places in limestone formations at the edge of pine forests. It is easily recognized by its very coarse foliage.

Clusii and Rhodia are white singles. Parnassica has very distinctive hairs on stems and the underside of the leaves. It is similar in growth to Peregrina. It is a single, black and red in color.

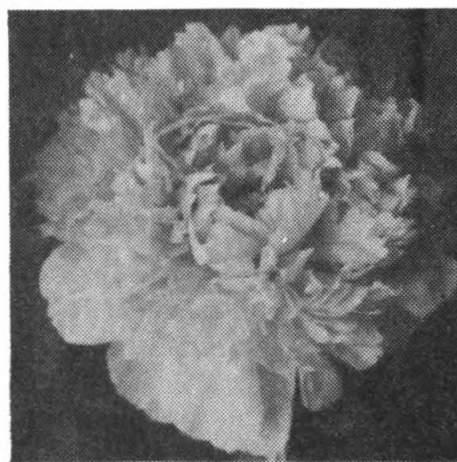
Pictures of Nassos Daphnis and the results of some of his work were also displayed at the exhibition.

The Natural History Museum of Kiffissia, a suburb of Athens is the source of the exhibit. The work of compilation was done by Elli Stamatrakon, Niki Goulondris, the botanical artis for the exhibition and the books illustrating the peony species of Greece.

"Paeon, a disciple of Asclepios, Greek god of Medicine, is commemorated in the names Paeonia and Peony."



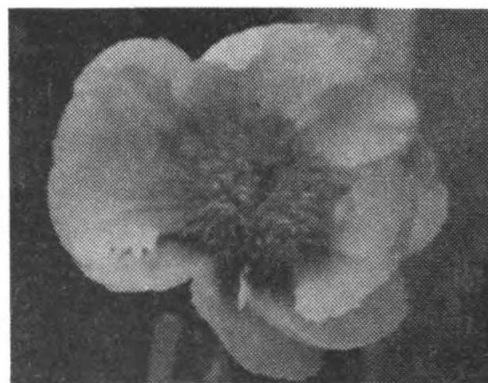
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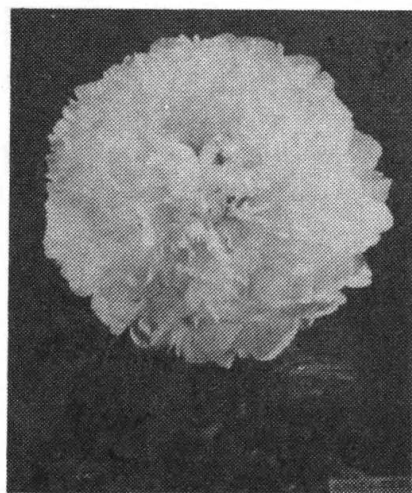
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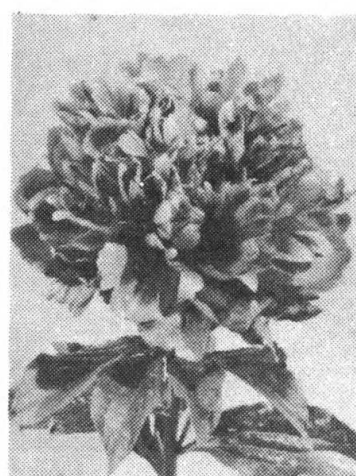
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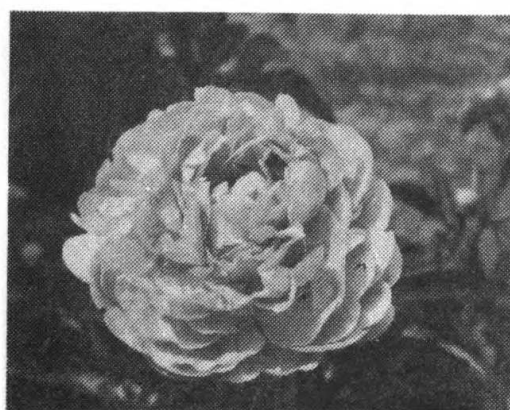
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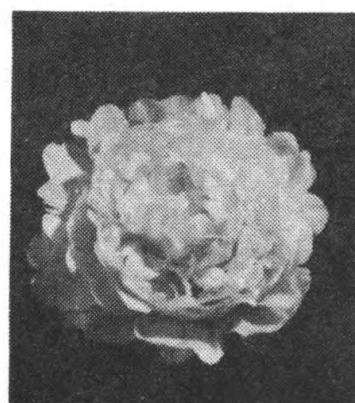
Glory Hallelujah



Hoosierland



Vivid Rose



Moon River



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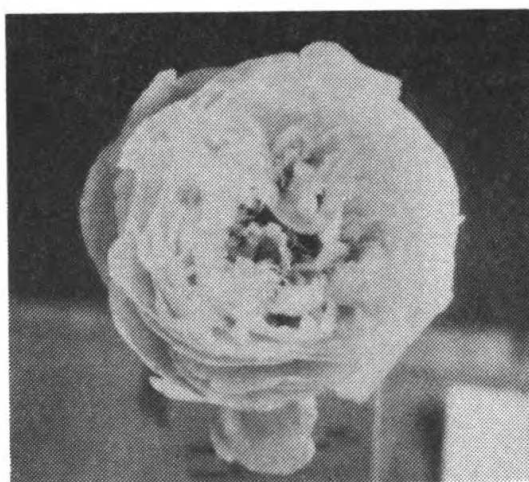
Savage Splendor



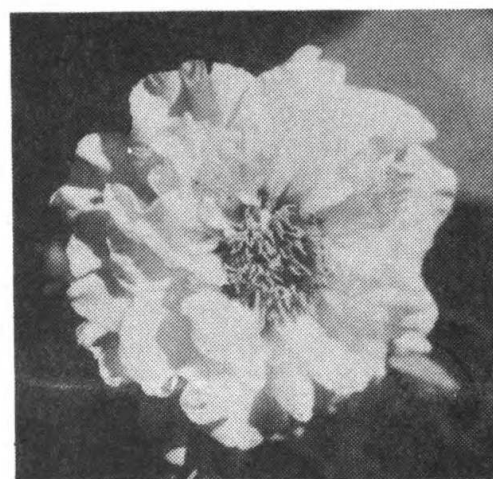
Howdai or Hodai



Chinese Dragon



Alice Harding T.P.



Age of Gold

**Photograph - Age of Gold - Brian Porter
Regina - Canada
Other Photograph - Edward Lee Michau**

NEW MATERIAL FOR FLORAL DESIGNS

Don Hollingsworth, Kansas City, Missouri

Subtle color compliments highlighting delicately hued petals. . sultry colors suffused with contrasting pigments. . .sometimes gently veined, bordered or flared, and in other cases patterned in bold contrasts. . .warm pastel colors. . .rich orangey reds. . . Each of these phrases describes some of the hybrid peonies. They offer a luxury of variations for the creative flower arranger.

Where ever the unique patterns and colors seen in certain of the hybrid peonies become known to artistically-inclined floral designers, their desire for having the flowers has risen dramatically.

A few years ago the late Keith Goldsmith wrote lovingly of the work of his wife Peggy, who designed arrangements for display during peony flowering season and the benefit of her design work in stimulating demand for the plants produced in the Goldsmith Nursery. It was the unique color patterns seen in the early hybrids which Keith singled out for special mention in attributing the source of the sales value of these displays.

Lately, I have directly observed the response of discriminating flower arrangers when introduced to the new peonies. Quite unplanned, I must acknowledge, some of Kansas city's more elite flower designers saw some of our peonies, that had been arranged by a professional designer, and where especially excited by the effects obtained with the hybrids. Subsequently we were asked to supply flowers for a hundred table arrangements upon the occasion of a celebration opening a new wing of the major art museum and gallery in our area. The flowers we furnished were of early hybrids and tree peonies and much new attention resulted, in connection with this activity.

Now, there are already requests in hand for flower for two dinner celebrations schedulted for next spring. I may or may not be able to supply sufficient flowers, but the demand for them bears out Keith Goldsmith's point. Paraphrased, that point is that hybrid peonies have points of beauty that are unique and unknown in the traditional peonies of the lactiflora (Chinese Peony) type. The logical extention of that point is that they are to be valued in and of themselves and not especially judged upon the standards which have been established for the traditional forms of peony. Their unique points are often especially well shown by using them in good floral designs.

The hybrid peonies offer not only unique colors, but patterns as well. It is in the patterns that they are most unique. Overall colors in tint of ivory, yellow and pink or in white are often highlighted by sharp red or lavender in stigmas, filaments and often in similarly colored flares at petal bases. Suffusion of lavender color

through creamy yellows produce ivory tones, red suffusions produce peachy tones. Apricot and clear lavender petal colors are seen with and without highlighted centers. The yellows of the Lutea and Itoh Hybrids often go well with the sharp reds of the midseason herbaceous hybrids. And so on.

The fact that single flowers forms are prevalent in the hybrids become an advantage in floral design. Some of the most subtle color options occur among patterned flowers. The fact that many of the hybrids are relatively sterile is sometimes accompanied by relatively lower production of pollen and these may be preferred, pollen having sometimes been a source of criticism of single peonies in the florist trade. I gather that at least for one day events the designers have not been troubled with pollen, perhaps being sufficiently more intrigued by the novelty of the new colors and patterns, and accepting the pollen without notice.

Accumulating flowers for special events is helped by using some of the same techniques that are applicable to the collection and storage of flowers for exhibition. Some of the better color combinations for floral design may involve varieties which are not in flower at the same time. But cutting in soft bud stage and storing in a refrigerator, the opportunity to have prime quality flowers opened at a controlled time is readily available. The flowers can be opened at your option and most will keep for a few days to a few weeks under conditions that can be maintained in an ordinary household refrigerator, perhaps not in a frost free refrigerator, however.

My own method for storing peony flowers is to cut them in soft bud stage (half open in case of full doubles), wrap them in newspaper and lay on shelves of an old refrigerator. If long stems are required, then it may be necessary to take out part or all of the shelves so that the bundles can stand. It is possible to store a lot of flowers in one refrigerator this way. I do not bag or wrap individual buds for this purpose. It is desirable to arrange the bunches of flowers such that air circulates reasonably well, otherwise cold spots may occur next to the cooling surface and it can get cold enough to freeze some of the flowers. The colder the chamber can be made without freezing, the longer the flowers can be stored. I have upon authority of Mr. Bigger of Topeka, Kansas who has sold cut flower peonies for many years.

When ready to have the flowers opened, they are taken out of the refrigerator the previous day, the dried ends of the stems are cut back to fresh tissue and the flowers stood in fairly deep water in a cool room to open. If they have been in storage longer than they can tolerate, some will fall immediately and others will have poor appearance, but given a sufficient number of kinds you will soon find out which ones are best for storage and something of the stage for cutting to get good results. Most any peony stores well for relatively short periods.

PEONY CULTURE

by William H. Krekler, Sommerville, Ohio
Bulletin ±207

In Ohio, after the frost kills the top of the peony in September, we think is the best time to transplant herbaceous peonies. We have always planted from August first until the soil froze hard, about Thanksgiving time but the September plantings were always the best. Their buds were fully developed then and they still had time to make roots before the ground froze.

In California, there is no frost to kill the tops, so they should be cut to the ground in autumn to force a rest period. It is advisable to plant peonies on the north side of buildings, in that area. It is not so hot and the soil will not dry out so quickly. Water frequently.

Root divisions may be kept over winter in cold storage for spring sales. They should have plenty of roots because they can make few, if any, before hot weather comes. Spring planting avoids the frost heaving problem. Getting soil replaced over heaved plants before they start to dry is a messy wet task. Older established plants seldom heave, unless in a very wet place.

In new plantings, a mulch will help avoid heaving. A mulch is not to keep a new plant warm but only to keep the soil frozen. It keeps the sunshine from contacting the soil and thus thawing it.

Every time the soil thaws and then freezes that night it pulls up the plant, little by little. Do not let it thaw.

Grass clippings, leaves and fine mulches pack down and cut off air, which may cause mold, rot and holds too much moisture.

Coarse mulches as corn stalks, evergreen boughs, excelsior, a thin layer of straw, will shade the soil yet will permit air to the surface.

Never use hay as the seed will grow and you will have a meadow to hoe out later.

A low growing winter grass got started in our rows, which was too low to do damage and it helped to keep the soil frozen and from washing. The peonies that I have sold in Alaska always did well, if they were properly mulched.

After a peony clump has been washed clean and diseased parts (if any) cut out, cut roots back to about six inches in length.

When digging, why try to get long roots, as they will be cut off later. Most generally, you can cut at least one division off the side of the clump. The remainder of the clump can usually be cut in two or perhaps three nearly equal parts.

Use a short sharp butcher or small hunting knife, but do not cut until you have carefully figured where to cut, so you will have

an equal number of buds on each part. Now with a good sharp peeling or pocket knife make remaining divisions, providing any can be made with buds on each one. Always cut away from your holding hand. Should you knife hit an unseen soft rotten place and suddenly zip through, your hand would not be in its path. My hand has many scares attesting to my being in too much of a hurry. Always cover the thumb of your hand that holds the knife, with a thumb guard. Easily obtained, from cutting a finger or thumb out of a tough old leather glove. Always use, as you cut toward it, in trimming a division.

Peony divisions may be kept in bushel baskets containing barely moist old sawdust until ready to ship. Fresh new sawdust will heat and be too hot. Sawdust too wet, will rot roots. Never put sawdust in a trench or hole with peony roots as this may cause them to dry. It may be put on top of the soil as a light mulch. I use sawdust an inch or so deep on seeds that I have sprinkled on top of a bed. Place seeds about one inch apart. This sawdust helps prevent soil drying, and weed seeds from sprouting. (Keep seedlings weeded and transplant in two years, in rows.)

Hybrid peonies are divided about the same as lactifloras, also hybrid seedlings take longer to attain flowering size than lactifloras.

Every variety is marked with a one by four inch heavy plastic vinyl label, on which the name is written with a common soft lead pencil. It is then varnished (no shellac) over the pencil marks, so later the soil can be rubbed off the label, with thumb without smudging the pencil marks. These tags are pinned to the ground, in the row with a galvanized nine inch long gutter nail that has a rather big head. My gravely mower can cut off peony tops, in autumn and pass above these labels, without harming them. These labels last for many years. Always keep a record book in case some mischievous youngster pulls up your nail stake. Zenob, with a poison for thrip makes a good peony spray.

Do not buy peonies according to price. High price generally means that the peony is new and as yet, scarce. It may or may not be superior. A peony named does not mean that it is perfect but only that it is too good to be put on the compost pile. During the flowering season, try to go to local peony nurseries and take names of YOUR (not his) favorites. Also see if his stock is young, vigorous and healthy. Never, never buy peonies that you see flowering only on any one date but be sure to have early hybrids, midseason, singles, Japs etc. also late doubles. Late reds are scarce. Do not judge which varieties will always flower on our Memorial Day as flowering dates may vary a week or so.

Plant peonies that you will cut to be your guests or for graves, in an inconspicuous place. Cutters should carry blooms high above their bush, so you may have a complete harvest without cutting leaves. Never cut over half of the flowers of a peony plant. For

landscaping, with peonies, select a peony with flowers that are low on the bush but not nestled down among the leaves. We should use more dwarf varieties (as Dutch Dwarf,) for edging walks and beds, on graves, and spotted here and there in low evergreen foundation beds. Peonies make a lovely hedge, when planted about two feet apart. A real show place is a wide border of peonies, with blooming date from first to last of season, with some bulbs, daylillies, phlox and mums, intermingled.

Plant this wide irregular bed in front of a background of better shrubs, with a wide sod walkway between so roots and shade of the bushes will not harm the peonies. This border of peonies should average about four feet apart. Some better bushes are — rhododendrons, hardy azaleas, clethra, Ilex, prunus triloba, persian lilac, some viburnums, with an occasional hemlock, canoe birch clump or dogwood tree.

For beginners some dependable reasonable priced varieties of peonies are — (red) TEMPEST, MONTEZUMA, RED CHARM (blush and rose) WESTERNER, FLAME, Mrs. F.D. ROOSEVELT AND DAWN PINK (Near White) MISS AMERICA, MYRTLE GENTRY AND DO TELL.

Plant and enjoy more peonies.

TREE PEONY TOPICS

Louis Smirnow, Brookville, L.I., New York

Landscape architects are now planting tree peonies, more than ever. In many areas they bloom the same time as Rhododendrons and Azeleas. Last June I spoke to some landscape architects about the use of the tree peony. There was a wide range of selections but here are a few of their favorites.

White	-	GESSEKAI and GODAISHU
Pink	-	MOMOYAMA and HANA KISOI
Red	-	TAIYO and NISSHO
Purple	-	RIMPOW and HANA DALJIN
Marron	-	UBATAMA and HATSU GARASHU
Yellow	-	AGE OF GOLD and MARCHINESS

* * * *

Do not plant a tree peony too close to any other plant. Plant them at least three feet from any root system, especially hedges. The roots of hedges spread far underground and will prevent the tree peonies from growing properly.

* * * *

My favorite varieties of tree peonies of unusual beauty not often seen in the average garden, HANA ASOBI, KAMADA NISHIKI, SAHO HIME, SILVER SAILS, AKASHI GATA, GEKKEIKAN, HATSU HINODE, OTOME NO MAI, KOWKA MON, SAVAGE SPLENDOR.

Several of the above are bi-colors. They are easy growers and bloom freely. DR. MARTIN SMIRNOW is a white 12 to 14 inch tree peony bloom.

Professor A.P. Saunders was Secretary and Editor of the first Bulletins published, then known as The Bulletin of Peony News. Bulletin ±1 published in 1915. The following articles are taken from Bulletins ±2 and ±3, published in 1916. Mr. A.H. Fewkes was Vice President when he wrote the article, The Odor of the Peony. Now over 60 years later we are asking the same questions, wanting the same information. Will you report your findings to this Secretary?

THE ODOR OF THE PEONY

By A.F. Fewkes

From - Bulletin of Peony News No. 2 - May 1916

All peonies have more or less odor, but how few there are, comparatively, that are fragrant or possessed of a sweet odor — that delightful fragrance which so much resembles the odor of the rose. We all admire it, and wish that all varieties were equally sweet. But as they are not, an analysis of the reason may be of interest.

So far as I have observed, full double, rose-pink varieties are the most fragrant, some so much so that the old name for them was “rose peony”.

At the other extreme are the deep crimson varieties, many of which have an odor that is almost pungent, or resembling very much that of the poppy. Now, if we go through a collection of peonies and test each variety for fragrance, it is safe to say that we shall find that sweet odor follows closely upon the transformation of the stamens into petals. This would lead us to surmise that the sweet odor emanates from the petals, for we do not find any of the single and semi-double rose-pink varieties with the same sweet odor we find in the full doubles. The odor probably is there, but is overwhelmed by the rank odor of the pollen.

Why color should make a difference in the amount of odor given off by the petals is a mystery, but if certainly is so, for with but one exception known to me, all of the deep crimson varieties with full double flowers are practically odorless, while the greater part of the pink or white varieties are more or less sweet.

If these observations are correct, it would seem that the source of unpleasant odor in the peony is the pollen; and it naturally follows that if we would have all of our peonies fragrant, or at least free from disagreeable odor, we must eliminate pollen. This would limit our collection to two types of bloom, those in which the stamens have all been transformed into flat petaloids as they are in the rose-form type, and those where they have been changed into club-shaped petaloids as in the Japanese type.

Now the question arises, should we place too much stress upon

fragrance? I believe we should not; color is the first feature to attract our attention, and we want all the various forms and combinations of petal and stamen that Nature will give us, to present this color in the most attractive manner. If by chance or careful breeding fragrance is added, well and good, but give us first clear colors and beauty of form.

A SYMPOSIUM ON FRAGRANCE

*By A.P. Saunders, Secretary
Bulletin Peony News No.2*

There are many reflections that suggest themselves on the interesting article by Mr. Fewkes, printed above.

In the first place, it is evident that the whole matter of the odor of peonies is one to which growers, both professional and amateur, will do well to devote a greater attention.

The Secretary has long been considered by his friends to be of a disordered mind on the subject of peony fragrance because he has maintained the odor of some sorts of peonies to be comparable to that of the finest of June roses. If this is true — and it is true! — we should say so in more emphatic tones than we have used in the past. For there are many who do not even know that the peony has a fragrance.

Preferences indeed differ in the matter of odors. We should probably all agree off-hand as to the pleasant smell of the single varieties; an yet in our bulletin No. 306 our careful and conscientious Nomenclature Committee gives its verdict on the odor of the single variety May Davidson in the terms “fragrance pleasant XX.” Is this an exception to the general rule in single varieties, or is it an exception to the generally accurate observations of the Committee? That will be for those to say who have the variety under observation.

Further, is Mr. Fewkes correct in thinking that the presence of stamens in varieties not perfectly double is fatal to the odor? I find that of the varieties described in Bulletin No. 306, under the heading “semi-double” one in every four is given credit for a pleasant fragrance.

These questions are not only interesting, they are important for us, and it would be of great value to gather together the opinions of those who grow and appreciate the peony.

Will you therefore lay it on your conscience to make particular note this spring of the odor of the various sorts in your collection, particularly those which are conspicuous for odor, whether good or evil?

If you will, when the season is over, report your conclusions to the Secretary, the opinions thus accumulated will, in a later bulletin, be collated and published for the benefit of all.

PEONY FRAGRANCE

*Peony News #3 -- 1916 - A. P. Saunders, Secretary
Bulletin of Peony News*

Those who read the article on the odor of the peony by Mr. Fewkes in Bulletin No. 2 will remember that he began with the statement that few peonies, comparatively, possess a sweet odor. I hold a precisely opposite view; for to my nose the majority of double peonies have a good odor, and a large number of them are highly scented. Can I get anyone to agree with me in this?

During the past season I made a careful study of my collection with a special view to the question of fragrance; and I offer as a result the following rather tentative remarks:

There are four distinguishable types of odor in peonies, for which I shall use the names Rose, Honey, Lemon and Bitter.

1. The rose fragrance is that which would commonly be recognized as the natural odor of the peony. It approaches the odor of a June rose, and in some cases closely resembles it. This type of fragrance exists very strongly in *Edulis Superba*, and in many whites, notably in *Baroness Schroeder*, *Mme. de Verneville*, *Le Cygne* and *Festiva Maxima*.

2. The honey odor characterizes those peonies with bright yellow central petals; most markedly in *Philomele* and *Candidissima*, two of the most highly scented of all peonies. I have always called this a honey odor, but was confirmed in the designation by overhearing a lady at the New York show this year exclaim as she sniffed a vase of *Philomele*, "Why, it smells just like honey!"

3. The lemon odor is a peculiar aromatic and fruity smell, disagreeable to some in freshly opened flowers, but becoming more acceptable as the flowers mature. *Mathilde Mechin* offers a most pronounced example of this type of odor; *Gloire de Chas. Gombult* also possesses it. It would seem, therefore, to accompany those blooms that have a mixture of salmon and pink central petals; but perhaps not all of them.

4. The bitter odor of most stamen bearing flowers is generally considered disagreeable when the blooms are young and the odor at its strongest. This odor is sometimes, and appropriately, called "soapy." Almost all singles possess it in an unmitigated form, especially the single reds, in many of which it is quite repulsive. In the more double varieties, as *James Kelway*, *Mme. A. Dessert*, *La Tulipe*, *M. Martin Cahuzac*, the odor is much less marked than in the singles, and it grows fainter as the blooms get older, so that it is not infrequently pronounced agreeable in flowers that have been open for some days. To me it is never better than indifferent.

The line of demarcation between these types of odor is not tightly drawn, but if characteristic examples of each be taken, the

difference is manifest enough.

I hope this attempted classification may bring comment, amplification or protest from such of our members as lead a vivid olfactory existence.

PLANTING PEONIES

*R. W. Tischler, Tischler Peony Garden-
Faribault, Minnesota*

Peonies can be planted in August, but I do feel that this month is too early for planting. Mr. Brand used to dig and replant some of his older fields during this month, with good results. Keeping of the planting stock was always a problem and so as quickly as possible they were field planted. The eyes on this stock were very small and made for difficult dividing. As he wanted only planting stock it didn't make too much difference just how the root looked. I start my diggings of the Fern Leaf Peony the first week of September as this variety of peony dies down very early. Peonies can be dug and planted right up to freezing time with no ill effects. Also they can be dug and planted in early spring with success.

Peonies should always be divided and cleaned up before planting. All peonies produce hollow or defective roots. These must be removed before planting. Also roots that are growing too close together should be thinned out. Just the good, fresh, young roots should go back into the ground.

If a peony bush is blooming good, I would not remove it. Only reason for removing a peony bush would be for propagation or that it had been planted in the wrong spot. Once planted a peony bush should give years of enjoyment.

Large, old peony bushes are very hard to dig and clean up. One needs a very strong spade. First I would remove the foliage to about six inches of ground level. This would allow one to get a good hand hold for lifting and handling the plant. About one foot from the plant spade all around the plant. Go one spade deep. Now, I know this sounds cruel, but I would use the spade to cut the plant into four parts. This would make each piece easier to handle. To remove the soil if it is dry, a poke stick (a short piece of a hoe handle or similar, sharpened to dull point) can be used or it can be washed away with a stream of water. Be sure to remove all old and damaged roots before replanting. Never replant a complete old clump as it is already root bound and with too many damaged roots that will cause you more trouble later on. Happy Planting.



If you cut a tree, plant a tree.

It is nature's replaceable energy.

EXPANDED THOUGHTS ON SEED EXCHANGE

Chris Laning, 553 West F. Ave., Kalamazoo, Michigan 49007

Most of us don't realize the need for recovering lost peony species and discovering new ones since the gene pool of our present hybrids is so mixed that realizing their full potential is mind boggling. So our peony seed distribution seems to be adequate for the present, but advancement is not the only goal. Professor Saunders' work is not yet completed and we are the ones to carry it forward. New species and lost species offer the challenge to move forward -- this is **our** challenge. I believe seed exchange with other nations is a good route to take. Probably the most productive procedure would be through botanical establishments of foreign countries.

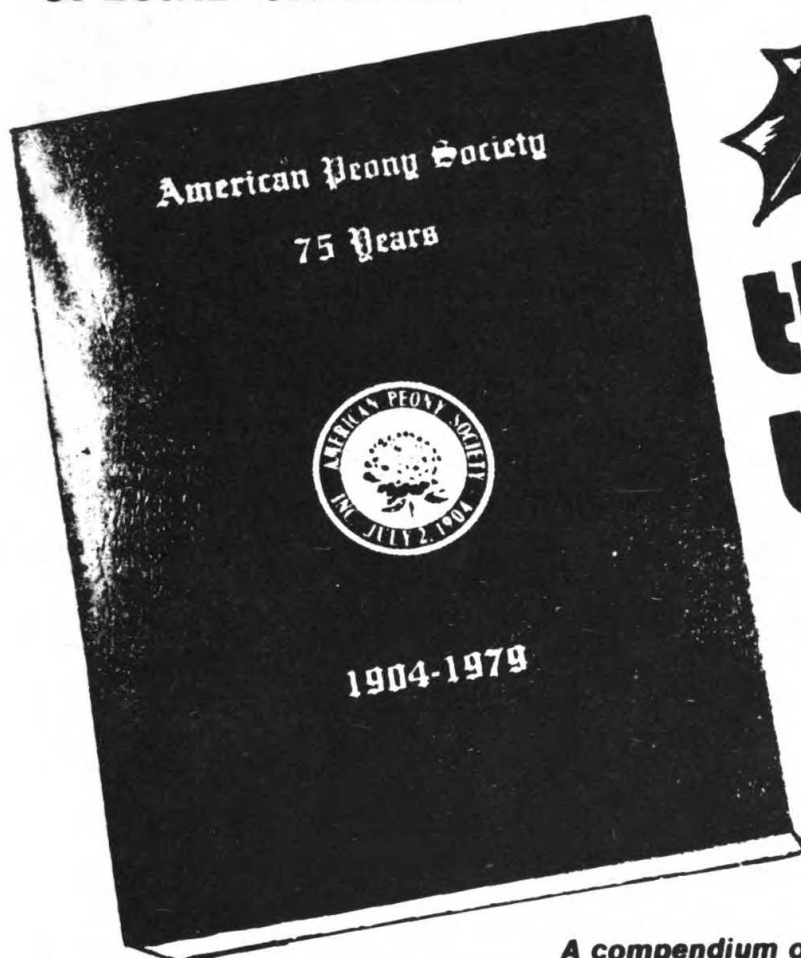
What do we want? This we want: *P. obovata*, *P. coriacea*, *P. officinalis alba*, *P. decora* and *P. decora alba*, *Ozieri alba*, *P emodi* (and there is another species that grows on the mountains of India). This is just a starter; there are species that we don't even know about and we want them too! Even **varieties** within these species groups should be assimilated. Who can predict what results are to be realized with such an enlargement of our vista!

Because of the advanced states of our present hybrids, I believe crossing of species onto our "Syn-tets" will be less difficult than the route Professor Saunders had to take in crossing species onto *lactiflora* (*albiflora*). Also, there is a great possibility the resulting hybrids will be fertile in the F1 -- but even more likely in the F2 generation. All the work he had done should be repeated but this time onto ur tetraploid hybrids. Who, however, is equal to such a gigantic task!!

Evaluaton of the difficult species crosses takes considerable time since the blooms initially are smaller and have fewer petals then they do as adults (10 years old and more), and as if this were not enough, their F2's supply a host of changes in form, color and genetic content. There just is no way to know the worth of a plant! I know, I know, you can't keep them all! But be appraised that the problem is there.

In reading this article, remember this is a hobby. If it doesn't afford happiness while working at it, just watch television or go fishing.

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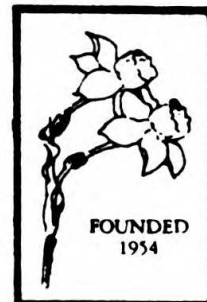
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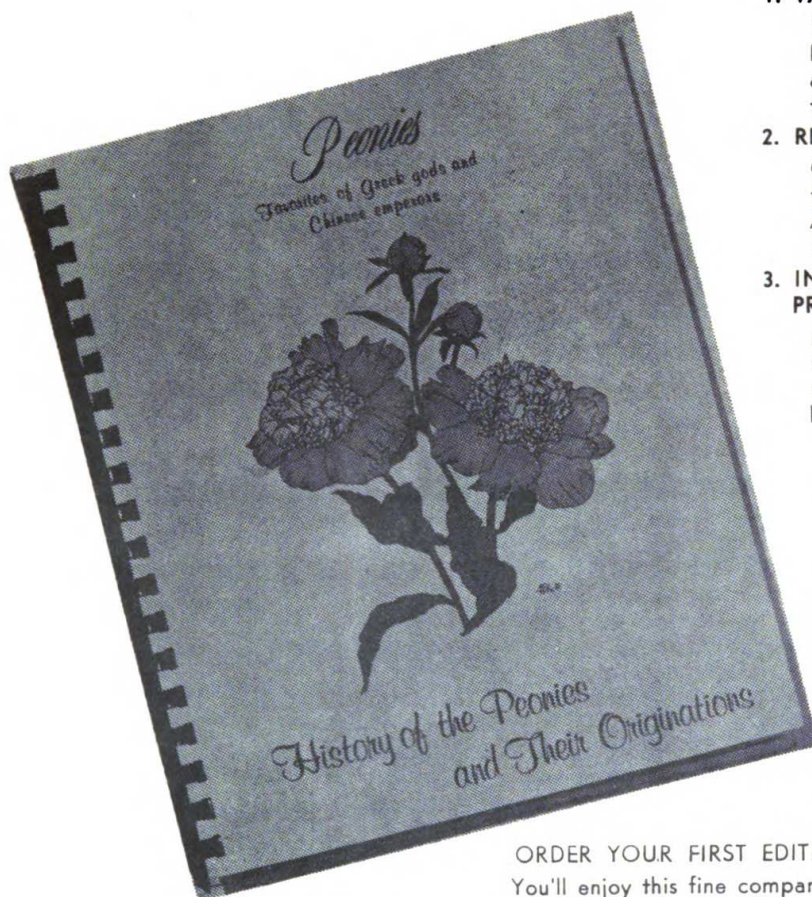
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