



Close Encounters With Peonies and Peony People

Bill Seidl—Manitowoc, WI

As with many peony lovers, my first encounter with peonies was, as a child, with some very old cultivars. They were *Edulis Superba* and *P. Officinalis Rubra Plena*. Both grew in my parents' garden. I still live in the house in which I was born, 1932, and can vouch that the former thrived in one location for 60+ years, the latter almost as long, before I transplanted both to a second garden, one acre in size. From our backyard I could see *Festiva Maxima* in one neighbor's backyard and *P. tenuifolia Rubra Plena* in another's. The latter still lives there today, and the owner, a 90-year old lady, says I can have it in the fall as it has not done well ever since a well-meaning daughter mulched it with cypress bark. It is down to three stems.

My second encounter with *Paeonia* was about 1960. During the long interim years I became more and more interested in gardening and developed rather eclectic tastes. This I attribute to two reasons. (1) My parents, being thrifty, always maintained a garden on our 50' x 100' city lot. A single car garage in the NW corner of the lot and a long driveway did not leave much garden space, but they squeezed in several fruit trees (plum, pear, apple), a strawberry patch, vegetables, a grape arbor, and a few annual flowers. No perennials except for the two peonies. During WW II the government encouraged home-owners to start Victory gardens, but my parents needed no such prodding. There was never any lawn in our backyard. Some memories of those times include Ma's plum dumplings, Pa's home-made wine (there's still some 40-yr. old wine left in the cellar), my graft of an apple onto a pear (It lasted three years and bore one apple), and a peach seedling onto a plum (it grew well and then blew out in the first summer rainstorm), my annual flowers seeds from Burpee for sending in a 10-cent newspaper coupon, some General Ike tulips for a 25-cent coupon (I still have the tulips), and pulling a coaster-wagon full of bunches of carrots for three blocks to a Farmers Market at sunrise. I went with one of my brothers and Pa said shoppers would feel sorry for us two little kids and buy from us first. He was right. I had to help with many garden chores, but mostly it was by choice.

As a youngster I looked forward to visits with my great Uncle Gil Thompson and Aunt Kate. They grew gladiolus for a local florist, roses, and a few other perennials. He showed me how easy it was to hybridize gladiolas and grow the seeds to flowering size in two years. No cold stratification necessary. During the off-season he rolled Cuban cigars in his "den" which was lined with ribbons and rosettes won in gladiolus exhibitions; she made out income taxes. I thought they led a great life. I also read about the work of plant breeder, Luther Burbank. All this impressed upon me the fact that most cultivars of plants had their origin as a seed, and one did not have to be a genius to raise some of your own.

In mid-1956 I finished a two-year tour with the Army (1.5 yrs in Japan). That summer I saved seeds from the gladiolas in the garden and planted them the next season. By 1958 I had to rent garden space to plant all the seedling-bulbs (corms). This also gave me a chance to grow daylilies and peonies in quantities the home-garden could not accommodate. I ordered daylilies from Russell Gardens, TX, and

from Gilbert H. Wild & Son, MO. The Wild catalog was an eye-opener because it listed herbaceous hybrid (HH) peonies with parentages as well as lactifloras. I ordered some of both types, and thus the second encounter began. Crossing lactis did not much interest me because so many breeders had already done so in such immense numbers that I did not think the envelope could be easily pushed any further. I selected one seedling, L9, from those days and sent it to Al Rogers, Oregon. In the early 90's he had visited here and admired the plant, rather low-growing, a floriferous semi-double to double white.

Crossing the HH's did interest me, but the lack of doubleness was a turn-off. Some that I had were Rose Noble, Rushlight, Firelight, Pageant, Roselette, Halcyon, Diantha.... The "yellows" were very pale and not likely to deepen in any crosses. I did think a proper goal would be doubles with rose flares. I have nothing to show from the few crosses made in those years. However, a few years later Lyman Cousins appeared on the scene (the 1969 Show in Mansfield, Ohio) with originations of that coloring which were informally dubbed "Inner-Glow Hybrids". At the 1972 show in Mansfield he was awarded the Saunders Memorial Medal for his hybridizing efforts.

During the 60's hybridizing gladiolus and daylilies took center stage. There were a few gladiola cultivars that had a mild raspberry/rose fragrance and I worked to improve that quality. Acacia was the cultivar most often used. (All these are tetraploids.) In daylilies the new tets were being developed, beginning in the late 50's, and I was eager to try these as they became affordable. Dr. Robert Griesbach was active in both areas. He introduced many glads that were highly ruffled and with heavy, waxy substance. And he induced tetraploidy in daylilies by colchicine-treating diploid seeds from Orville Fay.

The third encounter--and still continuing-- began in 1968 when I joined the APS. I wanted to find additional HH that were more likely to produce double forms and deeper yellows than the ones I had from Wild.

Coincidentally, that was the year a lady in New Zealand, Joan Wright, made available Lucky Star, a fertile tetraploid gladiolus (or acidiolus) resulting from Gladiolus x Acidanthera murielae backcrossed to A. murielae. (Acidanthera is a very fragrant diploid species, since moved to the Gladiolus genus.) This would give a boost to my flagging fragrant-glad project, and so I spent \$200 to obtain about 30 corms. I made hundreds of crosses and raised thousands of corms (105,000 seedlings one year, most unplanted). However, LS has only two genes for A-type fragrance which, in a tet, meant a fragrance intensity of 50% of that in the diploid species. Furthermore, during meiosis it seemed the two genes split evenly between egg and pollen cells, so that recombination could never exceed 50% fragrance intensity, and it was 25% in crosses with garden glads. I tried to induce tetraploidy in the species with minimal success. After a decade of crossing I gave up the project in 1978. I had developed allergies to glad pollen --- too much sniffing for fragrance. Also thousands of corms were too much to plant each spring and dig each fall. Peonies were not so demanding.

Dr. Griesbach had made similar crosses and introduced a few selections, but the fragrance was mild and no better than what I had in my seedlings. In the early 70's I met him (along with Mr. Fay) at one of the

APS meetings. He too thought the induced tet species was an alternative solution. I doubt he tried it though, as he had enough irons in the fire with his tet *Hemerocallis* and *Lilium* projects.

Breeding glads or hems would be a good project for wanna-be peony breeders. You could squeeze in two or three generations while waiting those long 4-6 years for your first peony seedlings to bloom. Roger Anderson and Roy Pehrson both bred gladiolus before they started with peonies. Roy registered four selections with the NAGC (N. American Gladiolus Council). And in Bulletin 334 an APS member in Estonia related his interest in gladiolus.

The first APS meeting that I attended was the 63rd Annual Peony Exhibition, in 1968, at the Mitchell Park Horticultural Domes, Milwaukee, WI, and that only for several hours mid-day. When I entered the reception area I paused to admire a big bouquet made entirely of one peony variety, a single white of beautiful simplicity, a green center of carpels and practically no stamens. A sweet, elderly lady of slight stature, stood up from the reception table and, beaming, told me that I was admiring White Innocence, which was bred by her father, Prof. Saunders. The moment she said that, I know who she was. She introduced herself as Silvia Saunders. It was my first encounter with a peony person, and what a way to begin personal encounters! I'm not numbering further encounters as they continually happen, sometimes most unexpectedly. Silvia took time out from her reception duties to introduce me to as many important people as possible. I remember Carl Klehm and his son Roy who had time only for quick hello's before continuing with their efforts to keep show events on schedule. She pointed out Sarah Klehm with son Kit, just a youngster then. And she made sure I did not overlook the hybridizing and seedling exhibit by Sam Wissing. I spent at least an hour listening to his spiel. His display included *P. lutea*, my first encounter with that exasperating species whose poor flower-carriage still plagues advanced hybrids today. In the next Bulletin, # 190, I was pleased to read that Miss Saunders, 66, had accepted the Board of Directors offer to be the new APS president.

1968 was also the year I learned of the Ito intersectional (i) hybrids and their introduction into the U.S. by Louis Smirnow. (I think he began advertising and selling them in 1967.) So I spent another \$200 to acquire them. Within a couple years or so I met Roger Anderson at a peony show and we agreed that these new peonies were cutting edge, the peonies of the future, and if we wanted to grow them in colors other than yellow, in our lifetime, we'd have to originate them ourselves. In this we found an equally enthusiastic leader and teacher in the person of Roy Pehrson.

I began to attend APS meetings regularly and primarily to obtain pollen of the lutea hybrid (LH) Alice Harding. Both Roger and I duplicated Mr. Ito's cross exactly, Kakoden x Alice Harding, without success. The next step was to try AH pollen on any lactiflora. I made hundreds of controlled, bagged crosses and obtained only one true hybrid, Hidden Treasure. The plant grows only 18 inches tall, if that, with rather wide-segmented leaves. The flower is good, a single yellow, but is hidden in the foliage or points laterally.

Using other pollen, probably Chinese Dragon, I obtained Rose Fantasy. I took it to the 72nd APS Exhibition, 1977, in Milwaukee as a seedling HT-1 where it won a Certificate of Merit and high praise

from Silvia Saunder, Bulletin 223, pp33-34. However, after registration it was transplanted and began to lose its full, rounded petal form. I have one plant left with no hint of its early glory. In her comments Silvia (now 77) noted that the Itoh hybrids are shown as "Herbaceous Hybrids" and added, "Not really an exact title". The exact title finally appeared at the 95th National Exhibition at the Boerner Botanical Gardens, Milwaukee, 2000, when they were shown as "Intersectional Hybrids".

From 1969 onward Silvia had organized a Hybridizers' Workshop (or Seminar) at the annual convention. Many subjects were discussed, the most trivial being whether pollen is better applied to the stigma with the finger or the brush. Roy Pehrson argued seriously and adamantly for the finger; Dr. David Reath, for the brush. He did so light-heartedly and with great fun to see Roy's response. But he was not playing the Devil's Advocate. He stored his pollen in plastic, rectangular pill-boxes (he was a vet) and I cannot imagine him fishing for pollen and later shlooping his finger in his mouth to kill the pollen before moving on to another cross. He used an alcohol-dip for the brush, but had others in reserve during the drying-interim.

At the 6th Seminar, 1974, Hamilton, Ontario, Roy Pehrson brought his own i-hybrid seedling, a black-red, single bloom from a cross made in 1969. It was the first non-Ito Itoh Hybrid ("intersectional" hadn't been coined yet) any of us had ever seen. This was included among 22 i-hybrids Roy sent me a few years before he died (Feb. 21, 1982) for further evaluation and possible introduction. I registered it as Lafayette Escadrille. Soon afterwards it began to develop narrow petals. I note that on the HPS website there is an image of it with normal, wide-formed petals.

The only other one that I named was Viking Full Moon. It continues to display fully-formed petals. A third seedling, still retained, is #RPWS-22, yellow with flares, petals narrow but not excessively. It makes a very large, vigorous plant. The other 19 were all discarded. These were of a purplish-red color. It seems the narrow petals or later development of narrow petals is most likely to occur with the darker colors.

In 1971 I bought an acre lot outside the city limits. Although my rented garden had expanded to about 6x its original size, it had become too small for my needs. Besides perennials, I wanted to plant trees and shrubs that one had difficulty finding around the city--- a sort of private arboretum. Over the years I planted Kentucky Coffee-trees, katsura-trees, cork trees, various conifer cultivars, magnolias.... especially magnolias. A leading breeder of the latter, Dennis Ledvina in Green Bay, taught me all about chip budding and it has been great fun to convert ordinary species trees into uncommon flowering specimens. At a peony convention in Minnesota Dr. Reath introduced me to an overseas visitor, Sir Peter Smithers, living in Switzerland, who was also interested in magnolias as well as tree peonies. He was especially interested in my Lutea Hybrid Anna Marie and arranged for me to send him a grafted plant via the Reath Nursery. In later years, his magnolias shaded out the tp's which he passed onto the Riviere Nursery, France. In my garden I have cut down or cut back trees to allow sun-loving perennials to grow better.

By the mid 70's I had my own plants of Alice Harding, but by then I realized other LH's might be more productive parents, never mind those wonderfully unique chromosomal irregularities that made it a superior parent for the i-cross. A feature article in Bull. 191, Dec. 1968, by Rev. John Fiala, was inspiring. He wrote that the laci x AH cross was "a rather fertile one" and that he had 150 plants (true hybrids ???) from some 200 crosses. He also claimed Lutea Hybrids such as Age of Gold, Thunderbolt, and others made fertile crosses onto herbaceous peonies. Whatever happened to all of these?? There was never any follow-up article.

Disappointed with AH I turned to the only other LH's I had in the garden. Age of Gold was a no-go for pollen, Chinese Dragon was fair, Reath's 199 (Golden Era) and 198 (Golden Experience) were good. One day, about 1976, I noted in a short row of germinating seeds from i-crosses, three plants with true hybrid foliage. All were from G. Era pollen. Varmints or cutworms destroyed them in short order, but I reported this event in Paeonia Newsletter and in an APS Bulletin.

I decided the way to go with the i-crosses was to breed LH's and AGLH's (Advanced Generation Lutea Hybrids) that were highly fertile, more so than GE. (I shall use that abbreviation for Golden Era.) That gradually became my focus and has remained so to the present.

My HH crosses were not given up. Using Saunders hybrids offered by Silvia during the years when she maintained her father's nursery, and using seedlings from Roy Pehrson, double seedlings became a reality. In one cross, 74H119, 75% of the seedlings bloomed double, all in shades of pink. (The "74" indicates the year the cross was made; the "H" for "herbaceous hybrid".)

The cross 74H120 produced some semi-double to double black-red seedlings. The petals were marred by fallen pollen. The parentage is Saunders 16350-F2 x Pehrson's Sable/Eclipse hybrids. Eclipse traits were never observed; that part of the parentage is suspect.

I crossed a lot of single, light yellow clones and raised 200 seedlings to maturity. A waste of time for doubles. About three were saved for slightly improved color and crossed with Sunny Boy when it became available from Chris Laning. The seeds were sold, mostly in NZ.

Goldilocks, with its most unusual parentage, became available in 1975. It does not produce pollen and the stigmas are usually "feathered", seldom producing a smooth surface to receive pollen. Never got a viable seed. Cutting back June 1st yielded some late flowers with the same problems. I did think it the best herbaceous yellow except for Mr. Ito's i-hybrids. Some kind of fungus attacked my stock of 20 plants, blackening the foliage in mid-August. This did not happen in earlier years. The plants came back but met the same fate repeatedly. Finally discarded.

Both Chris Laning and Roy Pehrson came out with their version of "Best Yellow". Mine was 79H18-2 from 71Y6-1, a single yellow X 74H119-5, a double light pink. It is a double, light yellow, quite good, and should be registered--- but not as "Bill's Best Yellow". First bloom was in 1982 as a three-year old (two years of growth behind it). It blooms about a week before Lemon Chiffon. It is 24 years old now

and last year I had two clumps. A garden visitor saw it in bloom and wanted a start. So I divided one clump and lined out five new divisions. Hybridizing is a challenge and fun. Propagation is not.

Another good seedling I should've propagated in large numbers is 79H14-1: Archangel x unknown. It's a very early-blooming double white....when established. Otherwise varies single to semi-double.

Seedling DPSW-1 is Carnation Bouquet. The "DP" stands for "Double Pink". I had decided to use pollen of Sparkling Windflower (Silvia Saunders had reported it was a tet) on all the double pink tet HH that I had. The object was to see how the very precise stamen-ring of SW would translate when converted to petals. I only got as far as Saunders 16350-F2 (later named Blushing Princess by Al Rogers). CB was only one of two plants, and nearly trashed. It was drowning in a sea of quack grass when I casually picked a flower for a bouquet. The recipient of the bouquet pointed out that it was "different" and asked its name. Thus alerted, I recalled the plant's location and gave it TLC thereafter. I called it "Louella's Carnation" until a garden visitor said the whole clump looked like a bouquet of carnations. This cross ought to be repeated with other colors so that CB has companions in white, red, and yellow. SW is available, I'm sure, from several specialists and Song Sparrow. As a parent, CB sets occasional seed. Theresa Griesbach once reported pollen production on a single-form flower. This is rare. When not well established, the double blooms thin out but I've never observed any reversion to stamens.

Back-tracking a bit, Blushing Princess appears in the parentage of 74H120, and in 79H18 via the parentage of 74H111. The latter is from BP x H3. (I have no idea what H3 is--- prob. a Pehrson seedling. My 20-yr-old card files aren't all that complete.)

Roy Pehrson once said: Don't cross a lactiflora with pollen of tet HH; all you'll get is soft seeds. That seemed like a dare, so I made the cross Kakoden x Greenland. I did get many worthless seed, but one of the good ones produced 81KG-1. It's a floriferous double white with red carpels. Probably triploid, as seed production is not good. It bloomed as a 4-yr-old plant in 1985. Still have the plant, never divided, too good to discard. Its original seedling designation was 81KSSD-1 because Greenland, when Roy sent it to me, was simply a Sanctus/Silver Dawn seedling.

Another interesting cross was LSW, Laddie x Sparkling Windflower. My first selection, LSW-1, still grows vigorously in the garden, making a large clump of single red flowers, thick husky stems, still liking some support. About 1990 I sent similar tenui-type seeds to Irene Tolomeo, CA from which two seedlings survive. Earlier this year she sent pollen from one of these and I used it on LSW-1. I've already peeked and know I'll have loads of seed.

A sibling, LSW-6, had very stocky stems but did not increase. Pollen from Roselegance gave RELSW6, a very stocky plant with large blood-red single flowers, fading with age. Tet, I'm sure. Plan to register. By the way, RE is extinct. A terminal case of botrytis wiped it out shortly after registration, but not before I made this cross.

My best HH is Patelegance (PE) and it's all Reath breeding. During a visit to his nursery he consented to my request for a little pollen of Lemon Chiffon shortly after its first-bloom year. (I had a lot of nerve.) I put the pollen on his own introduction Salmon Dream, obtaining both PE and RE, and two other seedlings soon discarded, perhaps too soon. RE was distinctive because it had an anemone or crested shape (I don't like the term "japanese"), rare in HH. Perhaps that form can be recovered by breeding with RELSW6. I once took Patelegance to a show in Milwaukee where Dr. Reath remarked that under artificial lights it had a soft, warm glow not appreciated in direct sunlight.

Other Salmon Dream crosses have produced excellent HH seedlings in my garden. I regard it as the best HH for breeding, bar none. Dr. Reath gifted me with a start, in the 70's, when it was still a numbered seedling. I did not realize its breeding potential at first. Recently I read that someone said SD must be a slow increaser because there is so little of it around. I think a more likely explanation is that after David registered it, he realized its great hybridizing capabilities and seldom listed it in his catalog to protect his own hybridizing interests.

I should mention that geographically I live mid-way between David Reath's home (Vulcan, Upper Michigan) and Roger Anderson's (five miles south of Ft. Atkinson, Wisconsin). What better location for a beginning peony hybridizer!! And the frosting on the cake is that both wives are great cooks. I enjoyed splendid lunches prepared by Sandra Anderson, and suppers by Eleanor Reath. David was on-the-go too much to come home for lunch but put away a lot of cokes instead.

In the area of breeding moutans ---"moo-DAH" is how a local Chinese lady pronounced it --- I acquired Rock's Variety from the Reath Nursery and crossed it with Shintenchi and Kamata Fuji. I bloomed about a dozen seedlings and it was difficult to discard more than a few. I registered Lavender Hill (RV x Kamata Fuji) and will register MRV-12 (RV x Shintenchi). This is similar to Guardian of the Monastery in color, an inch less in diameter, but much more floriferous. Roger Anderson named Angel Choir from the same cross. It has made a great plant, loaded with double white blooms with dark flares. A nurseryman could grow such seedlings by the hundreds, discard 10-15% at first bloom and sell the rest. No grafting. No dividing.

There is a lot of current interest in Rock or rockii seedlings. But isn't all this old hat? Years ago I read that Japanese breeders spent generations to eradicate these flares, and now in one generation we are undoing their work.

Except for Candy Stripe I steered clear of lactifloras. Roy Pehrson sent me his Junior Miss and Roger Anderson, Candy Stripe. JM is a 10 in my book, double pink, strong stems, wonderful fragrance. The virtue of CS is that its stripes are concentrated in the outer ring of petals. As the flower expands more and more all-white petals emerge from the center, giving the flower a picotee appearance. Other striped clones don't do this, incl. my own seedlings out of CS. It seldom produced laterals in my garden which, along with the distinctive coloring, ought to make it a wonderful florist's flower.

Roger has his Martha W., premier seedparent for the i-cross, dug out from his neighbor's (Carroll Spangler) Martha Washington variety asparagus patch. The spelled-out name was not allowed (duplicate naming ??) but the abbreviation was, which in itself violates the rules of nomenclature. But that's OK. What's done is done. I believe Roger crossed MW with other lactis for seedlings that would inherit its unique hybridizing traits. No go. Nevertheless, I think that avenue is worth driving down again.

Even before disillusionment with Alice H. I had made crosses for Lutea Hybrids. I numbered the seedlings 1, 2, 3.... as they were transplanted from the seedbed (usually after two years) to their permanent location 4' apart in rows 5' apart. In the seedbed they were 1' apart. I preceded the numbers with "AL" for "Advanced Lutea" (I've never made F1 crosses) until #51. At 51 and thereafter I used "SH" for "Shrub Hybrid". No letters are needed if it is clear that only lutea hybrids are under discussion.

By the way, sometimes in the past I have used terms like F2, F3... in the wrong way. It seems when the progeny of F1 crosses are crossed with each other, their progeny are F2's. The F2's crossed with each other yield F3's, etc. Back-crosses interrupt the numbering. An F2 back-crossed to an F1 or one of the parent species is not an F3. I think of it as three generations removed from the starting point, but that's not the same as an F3. I believe the F-numbering system is used by professional breeders of corn, petunias, etc. to create inbred strains for a particular trait, and when they are crossed with each other, the seedlings have hybrid vigor with predictable traits. Golden Era is probably about four generations removed from the original lutea/moutan cross, but it is not an F4 and its seedlings are not F5's.

AL-1 is from the cross Age of Gold x D223. The latter is a semi-double yellow Daphnis seedling. That's how it was identified when sent by Gary Seaman, working for the Gratwick Nursery in the early '70's. I have reason to believe that these numbers don't always agree with the Daphnis records, but they are consistently used in mine. # 1 is a semi-double yellow with some variegated foliage. I sometimes call it 'Yellow Rosebud' for the way the petals unfurl. The last seedling numbered, just this year, is # 240, a self-sown seedling discovered under the foliage of # 57. FB: 2006. Good carriage.

In between 1 and 240 many wonderful and surprising plants and some duds occurred. Getting rid of what I call the "lutea hook" is a major task. In a few cases the lutea hook was a major lutea bend with the blooms best appreciated from a worm's-eye view. In most it is a small hook just under the bloom which makes the flower point to the side. One of my nieces, about age 8, put one of these in a bouquet and said it looked fine. It pointed right at her. There is a lesson here somewhere.

In the time period for 240 plants to bloom I made new friends via correspondence and from garden visitors, won new converts to peony growing, learned some lessons on culture and what it takes to kill a healthy plant, and learned how to graft and teach it to others. Re the latter, the simple wedge-cleft graft works fine and can give you near 100% "takes". The scions don't have to be used the day --- or the day after --- they are cut. The same success rate can occur even after they are stored

cold and moist for two weeks. Longer than that may well work out fine. Spring grafting has worked for me, using scions sent from the southern hemisphere. Other experiments need to be worked out. This is a story in itself.

Killing a healthy plant is easy, just use herbicide carelessly. Or let it grow in a depression --- even if otherwise it is on a slope. Snow-melt water, if it stands for a couple days at the base of the plant, will kill the crown when it freezes to ice. A third way came unexpectedly. The 01-02 winter here started off very dry. We had relatively mild weather for Zone 5 but still minus 10 or 12 overnight for some nights. There was no significant snowfall until March. At the time I thought if this dry spell had occurred in May, June, and July, it would have been a disastrous drought for farmers. I lost many peonies, herbaceous and tree, on a rented lot with very sandy soil. (Daylilies were lost for area growers.) The tree peony buds fattened up in April and looked great; then they wilted and dried up. The roots were frozen, not the tops. It seems cold temperatures will penetrate dry soil much more intensely than wet. And that did them in. There is a scientific explanation for this that I shall not attempt. Some leaves had blown in around some plants in the fall which I left in place. Those plants were OK.

The tree peonies were one-of-a-kind seedlings. From the best one I let Theresa Griesback take scions and it is alive and well in her garden. She even brought pollen from it this season to use in hybridizing. I'm sure this one is good enough to register sometime. Some years ago I lost my only plant of Fuchsia Ruffles but it was also saved from extinction by Theresa via the grafting route. She returned a grafted plant and it now grows happily in my backyard garden. Ah, the benefits of sharing. I'm sure this has happened to others. Mr. Daphnis once lost his only plant of Hephestos but David Reath had stock of it via the grafting route and returned a plant to him at the Gratwick Nursery. (Daphnis lives in NYC, hybridized at Gratwicks.)

The original goal of the LH breeding program, to obtain hybrids of great fertility, was actually realized quite early. # 11, a purplish-red single with long stems and nodding flowers, FB about 1980, out of D223 x Chinese Dragon, is very fertile both ways. Crossed with GE and GEx (Golden Experience, A198 in those days) about 20 seedlings bloomed, most with very good fertility. The premier seeder for many years has been # 35, FB 1985, a purplish-red single out of GE x ChD. When pollinated by Zephyrus it produced #158, reg'd as Rosalind Elsie Franklin. It is not very floriferous but it displayed qualities that made it an immediate candidate for breeding. REF has been the pollen parent of many, many seedlings, most of them in NZ or Australia. The best seedsetters can produce 14, 15, 16 seeds per carpelhead. The highest number of seeds in one carpel, that I've observed, is four. In a normal 5-carpel flower, that's 5x4 or 20 seeds expected maximum. I've heard reports of more.

Planted 4' apart in rows 5' these plants can quickly fill up your garden, esp. when you want to grow other perennials, shrubs, and trees as well. Having no room for more LH's and unwilling to discard what I had, I put an ad in the Bulletin, # 267, Sep. 1988, selling pedigree peony seed, both herbaceous and shrub hybrids. The latter were priced at 10/\$20. Not many bought these. Almost none in the U.S. but Derek Irvine, NZ was a steady customer for about 15 years, the McFarlane's, NZ got some, and

Bernard Chow in Melbourne, Australia. Off-hand I'd say 2,000+ seeds were sent out. When color photos of the resulting seedlings began to arrive, and the exact pedigrees were given, I was very gratified. I felt they were still my babies.

I felt regrets that some of these weren't in my garden, but that may pass for I see now that Roy Klehm is importing many of the Chow Hybrids and the Irvine-Sutherland Hybrids. (Jane and Trevor Sutherland of Southern Charm Paeonies bought the Irvine plants.) One of the Chow Hybrids, Manrico, is alive and well in my garden, a gift-plant from Dr. Chow sent to me a few months ago via Klehm's Song Sparrow Farm. Cold storage in my refrigerator was needed to fulfill the plant's requirement for a three-month winter rest. Four other Chow Hybrids survive and bloom in my garden, arriving as scions from Australia about six years ago and spring-grafted here.

My grafting experiences began with Anna Marie (AL-13) blooming on rented land. I thought my elderly landlady might soon go into a nursing home and a new owner might want me off the land without too much notice. So in August, about 1984, I took scion wood to the Reath Nursery. David said it should graft well because the stems had matured early, and the outer layer of tissue was developing bark. Scott made 12 grafts. It took him about 30 seconds per graft. Two assistants made sure everything he needed was at hand, all necessary preparations done for him, and that fuel was ready when he ran out of gas. He looked like he was enjoying his work. His grafting method I would describe as "triangular", two downward cuts and the untouched round surface between them made the end of the scion look like a three-sided pyramid. Hard to explain without a diagram and more difficult for me and most people to do compared to the wedge-cleft method. The next day I did two more, triangular method, and all 14 grew the next year. 100% take. I was elated at the whole process. The next year I had the mother plant in bloom w/o missing a beat, ready to yield more scions, and 14 new plants. Compared to root-division propagation, this was a giant leap for mankind.

Out of 240 LH seedlings, only two bloomed as 3-yr-olds. I mentioned this once to Mr. Irvine and he said he is disappointed if any take longer than 3 years. A 3-yr-old seedling blooms at the beginning of its 3rd year, so only has two years of growth behind it. Derek lives in prob. Zone 7 or 8 with greenhouse type protection, with the plants in containers. In my environment the plants get a 6-month winter rest; they only need three. So if you can provide a 9-month growing period, 3-yr-old seedlings may indeed bloom. Let those who read of 10-yr-to-bloom take heed. And if you read that the Ito i-hybrids took 13 years to bloom, read my article on that subject in Bull. # 312, Dec. '99.

Anna Marie has "naked" anthers, i.e. no pollen. This trait was inherited from its seed parent Reath A197. It is consistently passed onto its seedlings and might be appreciated in breeding for dark-colored progeny. AM also backcrosses well with moutans. Pollen from Shintenchi produced three seedlings, all distinctive: Fuchsia Ruffles (registered), Mother Teresa (white, name reserved), and Pink Parrot (not registered). But this is the wrong way to go because there is no yellow influence. If you don't select for yellow inheritance, one ends up with moutans of hybrid origin. I think one wants hybrid flowers with moutan-like carriage, tetraploidy, a strong yellow influence, and rhizome-tending roots.

I mention the variability of the three AM seedlings because that is to be expected from such a cross. So why would the four Ito i-hybrids be nearly identical? If you look at the sibling crosses from Martha W. by Golden Era, there is variability, not identical seedlings. It simply indicates three of the four Ito hybrids are slight mutations of the original one hybrid. Even the shape of the flower buds, round or pointed, can be considered mutations.

The most memorable moments in the garden are of new people who love plants. Kris Casey is a local lady who was eager to learn grafting. Our first effort was a disaster; the right word for 0% takes. We provided an artificial in-door warm period to heal the graft union, but the medium was way too wet. The next effort was better. The third time was done at Nate Bremer's Solaris Farm, who got involved despite an already heavy workload with his daylilies. Those grafts were planted in rows in open ground but covered with clear plastic to keep the soil warm and rainwater off. But a bunch sprouted beneath the plastic which prob. was kept on too long. These of course were out of synch with the season and were lost. The next year Nate planted the grafts close together in a coldframe and lifted the cover before premature growth took place. These were easily mulched because condensed into such a confined area. I saw them Sunday, July 16 and they looked great. Hardly any failures.

Theresa Griesbach, no relation to Dr. Bob, first came here June 22, 1997. She was already a peony addict and an APS member interested in, of all things, reblooming peonies, something like the remontant, fall-blooming bearded iris! Well, she was delighted to find a few LH's reblooming, or late blooming beyond the earlier normal bloom. Thus began a long period of trading plants, pollen, ideas, etc. Despite the ease of grafting she had never tried it. So we held a grafting party of three, with Art Hartman, MI, joining us. He was another peony person encountered in the garden. Later, Theresa used her grafting skills to rescue a few of my seedlings from extinction.

Jerry Zuelsdorf also learned grafting. He oversaw some wonderful cook-outs in the garden with gourmet foods that I would never have experienced before. He now has some of my best seedlings in case I need to recover any lost in my garden. And that can happen easily enough as poor drainage has knocked out a few in the past.

Some years ago I read that the late Bill Countryman named Gauguin as the one peony he would keep in his garden if he could only grow one. For me, it would be Bartzella.

If I had to select the best in various categories, the choices would not be so easy. Lactiflora: Junior Miss gets my vote. Moutan TP: Shintenchi, but there are some awfully good ones out there. HH: Lemon Chiffon, closely followed by Old Faithful. Yellow Hybrid TP: Age of Gold. Dark Hybrid TP: Iphigenia. David Reath said Eleanor liked this the best for its vigor, floriferousness, and good carriage. I once asked David for his favorite, and he replied whatever he had featured on the cover of his catalog, which that year was Zephyrus!