



Hosta HORIZONS

newsletter of the
Russ O'Harra Hosta Society
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July 2011

Skaggs Benefit Auction

An online hosta auction held in late March benefiting the much-loved hosta hybridizing couple, Brian and Virginia Skaggs, was a great success. A record 142 items were donated and \$20,691.00 was raised - more than in any previous online auction. All proceeds went to Brian and Virginia.

Brian Skaggs was a Vietnam Veteran who lost a hand and an eye in the war. He was suffering from cancer and was paralyzed. He passed away May 10, 2011.

The auction - organized by Jeff Miller with assistance from Bill Meyer, Carol Brashear, Don Dean, and Joanna Kovalscik - was hosted by Bob Axmear at the Hosta Library.

The Skaggs are best known for their introductions H. 'Xanadu Paisley', streaked breeder, H. 'Xanadu Virginia Mary', and the hugely popular giant hosta, H. 'Empress Wu'.

President's Message:

"Gardening Grows the Spirit"
Summer Already!!!

Spring has been cold and wet, and cold and wet. Discounting frost, wind, hail, slugs, bugs, and other thugs, the hostas are so happy in the garden, and well - huge! It seems the garden has never been lovelier. I feel blessed especially when thinking of those that have endured tragic storms this spring. A little frost damage in the garden seems miniscule when thinking of your home and all your belongings becoming rubble in a moment's time. So we count our blessings every day and our gardens truly are gifts unto us all.

Our ROHS Spring Meeting has come and gone. So good to see everyone at the Prairie Learning Center. Thank you all for attending. I think the food was better than ever even though I was too nervous to eat. The meeting was good thanks to Herman Kopitzke giving me lessons in Parliamentary Procedure. New members welcomed were Donna Miller of Creston and Colette Janisch of Cedar Rapids. Donna's mother was a visitor. Spring meeting minutes will be in the fall newsletter.

This brings me to the announcement of a New Member Program being initiated by our society. It is similar to the American Hosta Society (AHS)

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Hosta Horizons

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MISSION STATEMENT:

The Russ O'Harra Hosta Society is an educational society open to all those interested in the genus Hosta. Its purpose is to promote the growing and enjoyment of hostas including their use in landscape design and the cultivation and development of new cultivars. The goals of the Society shall be in keeping with those of the American Hosta Society.

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T-shirts and sweatshirts on sale at Hosta College for the upcoming 2012 AHS National Convention in Nashville, TN.

President's Message:
"Gardening Grows the Spirit"
Summer Already!!!

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Voucher Program. What's it all about? All new, first-time members joining ROHS will receive a Welcome Card with a \$12 Gift Card to be used for hosta enclosed. The Gift Card is redeemable at any of the participating businesses which are all owned by ROHS members. This is a one-time deal. One Gift Card per new membership (single or family) may be used at one of the businesses supporting the program. The coupon expires in the year it is issued unless received after October 1st. If you already joined the ROHS in 2011, you will receive a Gift Card. More information about the program is posted on the ROHS website. Reldon is working to make the New Member Program happen. So tell a hosta friend or two and help the ROHS grow. Thanks!

Diana Bedwell, owner of Bedwell Gardens, Norwalk, is offering her own 'Thank You' to all new ROHS members. A coupon for 3 bags of that wonderful soil conditioner/mulch (\$12 value) from her nursery will be included with the ROHS Gift Card.

I am so proud of our vote to support HVX research. Hosta Virus X is a huge threat to the hosta industry and our very own hosta gardens. We have gotten 1000 HVX brochures from the AHS that will be distributed to spread the word and help educate about the threat.

The redesign and rededication of the Russ O'Harra 'Pocket' Garden has been accomplished thanks to the leadership of ROHS Vice-President, Eve Vanden Broek. Eve is writing an article covering the details of the project. Thank you to everyone who supported this project! Rosanne and Joan O'Harra were elated by the transformation of the garden.

Our ROHS Summer Garden Tour is all set to go on July 17th. The four Marshalltown-area gardens include daylily displays, and we should hit them just at the right bloom-time. Details of the tour are in the newsletter. I am so looking forward to this fun event! Eve has added a fun game to the driving portion of our tour and there are some really nice prizes. I'm probably not supposed to tell, but one

prize is Hosta 'Curly Fries'. Again, thank you to our members who are making this happen! The Harshbarger Hosta Society has been invited to attend our summer tour and auction. Please invite your garden friends also. All we need is your RSVP for lunch.

Our fall meeting, hosted by Mel Visser, is set for Sunday, October 9th at the Prairie Learning Center of the Neal Smith National Wildlife Refuge. Our speaker from *Garden Gate* magazine will be Marcia Leeper. Marcia is an enthusiastic speaker. She always makes sure her audience has fun. She is a Knoxville, IA native, raised on the family farm with true Iowa values. I have heard her speak many times, and I'm always eager to hear her again. She is one of the best speakers I have ever witnessed.

2012 Future Events

Donna Miller of Creston and Lisa Swanson of Orient have volunteered to host the 2012 ROHS Spring Meeting. Thank you, girls, so much.

Thank you to Kenn Outzen and Dean Koob, Jewell, IA. They have volunteered to organize our 2012 ROHS Summer Garden Tour. Nancy Briggs, Boone, IA, is also willing to have her garden on our 2012 tour. If you live in that area and would like to open your garden for the tour, please contact Kenn and Dean. Ricky and Teresa Innis, Newburg, IA, and Connie Dingeman, Pella, IA, also volunteered to open their gardens in 2012. Thank you, folks, for offering. We are keeping you on the list for 2013.

Robin and Carl Vos have signed on for organizing our 2012 ROHS Fall Meeting. Thanks so much.

So the future of the ROHS evolves. Sadly we lost valued founding ROHS member, Ted Davidson, on May 26th. Several ROHS members attended Ted's Celebration of Life. (Ted's obituary can be accessed at the ROHS website in 'News & Announcements'.) Ted was always a gentleman. He cherished his wife of 58 years and their family. And he loved his hostas. He spent a lifetime serving others throughout his career and through his membership in many service organizations. His sons spoke of Ted's theory on joining organizations: not just to sit there at meetings, but to really get involved and step up to make a difference - always striving to "make it better".

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O'Harra 'Pocket' Garden Planting

By Eve Vanden Broek

Rain Friday evening and the forecast for a wet Saturday morning put the 'pocket' garden planters in a wait-and-see mode. Mel Visser called Friday evening to ask if he should still leave his hosta donation under the steps at his church; Donna Yeast and Marlys Anderson both called early Saturday morning wondering whether the planting would take place. Under a hint of trepidation, yes, yes and yes was my reply. Cars loaded and the hope for a great day carefully tucked into our back pockets, we all set upon our way. Low and behold, en route, the clouds parted and by the time everyone arrived, the sky was filled with sun. We were going to have a great day.

Donna was first to arrive at the 'pocket' garden located on Principal's 7th Street grounds and wasted no time taking account of the hosta already in the garden and formulating a plan. We both commented how many more hosta there were than we expected, especially Hosta 'Golden Tiara', and determined that yes indeed, there were a few of Russ' introductions scattered about the small space. Fortunately, the hosta we would be adding all owed their existence to Russ' passion and dedication to the species.



"Let's dig," said Donna, and dig she did!

Due to heavy rain the night before and early morning showers, the mud quickly caked our garden boots as we cautiously maneuvered our spades, systematically moved hosta, and crisscrossed our way from one end of the 21' x 11' garden to the other. In just two hours, we dug up nearly every existing hosta and relocated them to a better suited location. Randy Craft, Gary Hoard and Reldon Ramsey offered plant placement ideas, helped determine the rededication stone position, captured the event in photos, and thoroughly enjoyed watching the ladies get their hands dirty. Jim Putney from Terrus Real Estate, Principal's property manager, served as supervisor to this crew of hostaholics.

Though the garden had been mulched earlier in the spring, the effects of the garden makeover made most of it disappear in the mud. Marlys suggested we get in touch with Diana Bedwell to see if she would donate some of the popular soil conditioner to be used as mulch. A few minutes later, Reldon was unexpectedly called upon to make a road trip to Norwalk. What? Where? And he had a time limit: one hour before Rosanne O'Harra and her daughter, Joan O'Harra Burke, were scheduled to arrive for the rededication stone placement.



The completed Russ O'Harra 'Pocket' Garden and the stone rededicating the rejuvenated garden.

Precisely at noon and impeccably dressed for a beautiful spring day, Rosanne and Joan arrived at the garden originally dedicated to Russ O'Harra in 1997. From the smiles on their faces, it was evident they were both very pleased with our work. It was now time to remove the small red broom and dustpan marking the rededication spot and set the stone into place. Joan beamed as Marlys removed the last shovelful of dirt and the two of us maneuvered the 50 lb. stone into place. *"It looks wonderful. Russ would love it,"* Rosanne said. But we weren't quite finished with this 'pocket' garden. As two flats of multi-colored impatiens were scattered throughout the bed, Reldon arrived with bags of soil conditioner – perfect timing. Finally, it was time to scrape off the mud from our boots, remove the garden tools and admire our work. Indeed, it did look wonderful!

This 'pocket' garden project took three months to the day to come to fruition and involved many individuals who deserve recognition. Without their commitment, enthus-

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Joan O'Harra Burke and Rosanne O'Harra at the garden rededication.

iasm, and willingness to participate, it would not have been the success it was. A big 'Thank You' to those who donated plants: Randy Craft, Gary and Kathleen Hoard, Barry Laws and Larry Skellenger, Trudy Van Wyk, and Mel Visser. For their labor of love, 'Thank You' to Donna Yeast and Marlys Anderson. Jim Putney secured Principal's blessing to revive this garden and dedicated part of his day off to help make the ROHS club shine. He deserves a heartfelt 'Thank You'. 'Thank You' to those at Principal for their acceptance of this project and allowing us the opportunity to beautify a piece of downtown Des Moines. 'Thank You' to Diana Bedwell. Her last minute donation of soil conditioner warrants much appreciation. Reldon, a BIG 'Thank You' for making a Speedy Gonzales trip to Norwalk. To Rosanne and Joan, we so enjoyed your smiling faces. And, a final 'Thank You' to Mother Nature for the beautiful day and nurturing rains following our May 21st planting. What more could we ask for?

June follow-up:

Record high temperatures and humidity several days in a row put a bit of stress on the plants, but they were monitored and watered accordingly. Then on Thursday, June 9th, an early morning hail storm took us by surprise. Some of the hosta leaves were damaged, but for the most part, the canopy of the tree shielded them. We have to keep in mind it's spring in Iowa.



President's Message: *"Gardening Grows the Spirit"* Summer Already!!!

(Continued from page 3)

I hope I am able to help the ROHS be a little bit better or at least sustain it "as good as it has been". I joined ROHS in 2002 during the two-term realm of our beloved Audra Wilson. She graciously handed off to Barry Laws, who also served four years as our leader. They both persevered through hosting conventions. Those are some big shoes to fill. I certainly feel inadequately prepared. I just like hostas. Really though, this society belongs to you, its members, and it is you that make it vibrant and alive.

I'll close by sharing the poem from Ted Davidson's Celebration of Life service.

The Garden of Dreams

*May you dwell in the land of contentment
Where the sky is a wonderful blue,
Possessing the key to the gateway
Of the Garden of Dreams that come true.
May the flowers of Love and of friendship
Forever perfume the cool breeze,
And the afterglows gleam with the glory
Of treasured and sweet memories.*

R. Cheney

"Gardening Grows the Spirit"

MM

Russ O'Harra 'Pocket' Garden coordinator, Eve Vanden Broek, tackles a large hosta clump. If not for Eve, this garden would have remained in need of a fresh look and unknown to most ROHS members. With her leadership and enthusiasm, she was able to transform the small garden into a refreshing, relaxing haven amongst the towers of downtown Des Moines in a very short amount of time. You did a tremendous job, Eve! 'Thank You' for all you did to make the project happen.



Hosta Travels With Renaldo: Hosta College

"Livin' the Hosta Life" with Reldon Ramsey

Piqua, OH is a 'fer piece down the road' from Pella, IA, and this year - my second year to attend Hosta College - I was very glad to be driving my mileage-friendly Toyota Prius. Gas prices had just begun to rise again the previous week. Linda Port, an online hosta friend, who lives near Morrison, IL (located a few miles east of Clinton, IA), rode along with me. It was her first trip to Hosta College, and now she's crossed it off her 'Hosta Bucket List' too. I have a feeling it won't be the last time she hitches a ride there though.

Years ago, when I first began reading online friends' conversations about Hosta College, I was puzzled by the name. Eventually I discovered that it's held each year at Upper Valley JVS while the students are on spring break.

And this year I discovered that Piqua has two exits off I-75. Last year, I'd come from the west and driven through town to my motel and then on to the college. This year we came from the north on I-75, and when we exited, every landmark I expected to see had vanished. I'm sure Linda thought I'd 'lost it' and was silently questioning her ride-share choice. Purely by accident, I finally found the school's road, and realized that Piqua is indeed large enough to have two exits. I was very relieved to make that discovery. I'm sure Linda was too.



Slip a raffle ticket in the slot and you just might win one of the 5 hostas shown.

It all starts on Friday afternoon as luggage is quickly dropped off in motel rooms and everyone hurries to the college to sign in and check everything out. Gardeners are starved for anything green after the long winter and the vendors don't disappoint. Hostas, conifers, shade perennials of all sizes, budding Japanese Maples, and garden accessories fill the cramped vending room. Both sides of a hallway beyond the dining room hold tables covered with raffle items - perennials, garden accessories, two

hosta quilts, and naturally... hostas. Linda and I perused all of the donated hosta and gardening books in the Hosta College 'Bookstore' too.

And of course, it's always so nice to see friends I know from online hosta forums and past hosta conventions. We only have a chance to see each other 'in the flesh' a few times each year. Linda was able to meet several people in person for the first time that she's been online friends with for years. There are plenty of smiles, hugs, and animated conversations while attendees try to do it all. Once again I missed the rare hosta auction that evening, but I did catch a glimpse or two this year.

Hosta College draws hostaphiles from across the country. From left to right, Herbie Altman(PA), Cindy Tomashek(MN), Steve Cunningham(TN).

Cindy signals that she will survive the early morning start now that she has caffeine.



Vending and all the other activities are up and running again before the first class begins. Many of the vendors are class instructors. Lee Coates of Peggy's Flowers, Highlandville, MO, had the 'hot' class this year. His hands-on 'Papercrete' demonstration filled three classes of 20. I'm sure he'll be asked to offer it again due to the high demand. Bob Solberg of Green Hill Farm, Chapel Hill, NC, vends and has taught four classes both years I've attended. AHS President, Tom Micheletti, also gave multiple classes this year. Many of the other instructors are from the Great Lakes Region which hosts the yearly event.

I will confess right now that I am a Bob Solberg 'groupie'. I always enjoy his humor-filled hosta talks no matter the subject. This year I had three opportunities to gain Bob's insights in "How the Hosta World Has Changed in the Last 30 Years", "Advanced Hybridizing 2011: Inheritance of Gold Leaf Color", and "Ask Bob".

(A condensed "How the Hosta World Has Changed in 30 Years" article appears on p. 9. Full-length articles on all three classes appear in the "Hosta Horizons" eNewsletter.)

“Miniature Landscaping With Miniature Hostas” was a fun change of pace. Mulberry Creek owner, Mark Langan, specializes in miniature herbs, hostas, and perennials. Ten years ago after the first plants a garden club purchased for ‘fairy gardens’ didn’t live, he researched plants for miniature container gardens and also discovered the classic Cicely Mary Barker flower fairy books. *“Fascinating books – learning tools.”*



“The definition of an expert is somebody who realizes just how little they know. The more I get into this, the more plants I find that I didn’t even know that existed.”

A completed ‘Fairy Garden’. All plants used should have the same cultural requirements to do well.

As he held up several pieces of miniature garden furniture and accessories, he asked, *“What is the difference between miniature landscaping and fairy gardening? These. I’m going to start with miniature landscaping first, because the fairy gardening is not for everybody.”*

W. George Schmid, author of *The Genus Hosta*, assisted Tom Micheletti in creating Tom’s presentation, *“An Overview of Hosta Species”*. Schmid’s completed update on hosta species is now available online at the Hosta Library.

AHS President, Tom Micheletti. 43 hosta species are recognized by Schmid. 33 are native to Japan, 4 to China, and 8 to Korea. Several Korean species are also in Russia where it adjoins North Korea.



The definition of a species is a natural plant population that has evolved over time. In the wild, plants of a species are not identical. Leaves and petioles, flowers and scapes have differences, but all have similar characteristics. The plant most representative of a population

selected by botanists is classified as a ‘form’ of the species. GPS is used to pinpoint locations.

Hosta fluctuans (from which *H. ‘Sagae’* sported) and *H. sieboldiana*, long considered species, have not been found in the wild in modern times. Mark Zilis looked unsuccessfully for *H. sieboldiana* last summer in Japan. Both may actually be hybrids of several species, and may soon be demoted to cultivar status.

The species class ended a few minutes early so I avoided the long lunch lines, and then had plenty of time to return to vending while the aisles were relatively empty.

Lunch at Hosta College. Culinary students prepare and serve lunch, snacks, and the Saturday evening banquet.



After the banquet meal, AHS President, Tom Micheletti, spoke about the many friendships he has made through his involvement in the American Hosta Society. *“We get in it for the plant, but we stay because of the people.”* And that has certainly been true for me. I have many wonderful friends because I discovered hostas ten years ago.

Linda and I joined friends in the hostality suite at a nearby motel after the banquet, and spent the evening enjoying the camaraderie before the end of our Hosta College experience.

We made a brief side trip first though. There were three motels in close proximity to each other off that I-75 exit. I pulled into the parking lot, and we went inside. Puzzled by not seeing any friends, we sat down in the breakfast area and talked about the day. After five minutes patiently sitting in that darkened room, I noticed the motel name above the registration desk. As you may have guessed, we were in the wrong motel. We were laughing so hard we both had difficulty getting out the door. We swore we would never tell anyone, and we didn’t that night, but it’s too funny not to share. We laughed about it through three states on the way home, and we’ll be laughing for years to come. Great hosta friends and great memories!

ROHS Garden Tour

Don and Mary Ann Lovell "Timbercreek Gardens"

By Reldon Ramsey

Don and Mary Ann Lovell moved to 46 acres on the Tow Farm south of Le Grand, IA, three years ago. Mary Ann had grown up there in the house built in 1954. The Lovell's acreage on the south side of Marshalltown had been home for 32 years, and Don named his gardens "Timbercreek Gardens" for Timber Creek that ran through the property. When the Lovells moved, the gardens and the garden name moved with them. The couple's youngest son lives on the acreage now, and Don is still retrieving some of his hosta seedlings and other plants from his old gardens.



"We always had a large vegetable garden, but as the kids moved on, it turned into a daylily garden."

Because they also had many large trees and shaded areas, Don created hosta beds as well. He began collecting hosta in 1976, and now has approximately 400. He likes the big ones and Hosta 'Sum and Substance' is a favorite. *"It is an ever-growing garden with many seedlings."*

Don's garden hosted Greg Johnson's collection of hostas until it could be moved to North Carolina recently. *"Yes, Greg and Lance were back and nine of us dug, packed and loaded up all their hostas - except several they left pieces of for me. Have only heard that they made it back, but not how the plants survived. That space is now home to 171 seedlings, cute little things."*

Don's gardening mentors were Helen and Dean Groeneveld (hostas) and Helen and Kempton Settle (daylilies and hostas). They shared plants with him and resources for getting new hostas

and daylilies to add to his expanding collections. Friends and *The Hostapedia* have been Don's best sources for learning about hosta. Money and time are his challenges, but with 46 acres, space is no longer a problem. He plans to continue hybridizing for streaked leaves, developing new hybrids, and adding as many new hostas as he can.



"I like chartreuse, striped and blue.. actually I like them all."



"I have 30,000 daylilies and have shipped plants all over the world, but I am now excited to have the space to really develop my hosta interest."

Three favorite hosta seedlings. All photos courtesy of Don Lovell.



'Hawkeye Fringe', a recent daylily introduction of Don's.

Don is actively involved in the Daylily World and

currently serves as president of the Central Iowa Daylily Society (CIDS). He enjoys the people in the club. His old garden was an accredited American Hemerocallis Society tour garden. New labels are required before he gains that designation again.

Asked what he would do with a chance to start over, Don replied, *"I just did that and am now in great black soil. Mary Ann grew up here and so she was happy we decided to move here and there is a lot of pasture for her horses and lots of awesome black soil for my gardens. Seems to be working out quite well."*

Hosta College/Bob Solberg: How the Hosta World Has Changed in the Last 30 Years

By Reldon Ramsey

"The reason I picked 30 years is because it's my 30th year selling hostas which is kind of neat. I've now sold hostas for half of my life. I got into it right at the beginning of when tissue culture hit the hosta world so I got to see what it was like before, and then I've been able to ride this thing that we all enjoy so much now. So what was it like 30 years ago?"

Almost all hostas were grown in the ground by backyard, mail-order nurseries that were actually hosta collections the owners had been able to accumulate over a number of years. In 1981, there were 214 registered hostas and about 150 species hostas were industry staples. *"If you saw a collection that had 200 hostas in it, it was world class back then."* Display clumps were dug each spring and individual plants 'lined out' behind the stock plant. *"When you went and visited somebody, usually you stayed all afternoon."*

"Can you imagine going to a meeting and there'd be no vending? The auction was huge. That's the only place you could buy a plant at a National Convention. There was no impulse buying." The leaf show was much more popular then because people could actually see newer hostas that might be available in the future. *"There were no color pictures of hostas. Can you imagine that? In the world we live in today, where everybody has some kind of digital something?"*

There were also no hosta pests - no HVX or foliar nematodes. The AHS could promote hostas as maintenance-free, pest-free plants. *"We can't say that anymore can we? And that's not necessarily very attractive to people coming into the hosta world."*

"Four things came together to turn us from a lined-out-in-the-soil hosta world to a containerized-vending-crazy hosta world. The first thing was pots." Hosta growers discovered that hostas grow better in plastic pots than in the ground in a

nursery situation. Hostas became the number one perennial in the United States because they can be grown in one location, shipped and sold in another location. *"The invention of the plastic pot has been great for the hosta industry."*

Tissue culture changed the industry in three ways. Slow-growing plants were much more expensive prior to tissue culture. *"It equalized the playing field..which is a wonderful thing."* Tissue culture also eliminates foliar nematodes. *"And it's given us a ton of sports. Tissue culture has given us all that so that's been really good."* About 1980, Mark Zilis developed a protocol for tissue-culturing hostas. Later he invented the 'liner' - a small plant in a plug. *"So we had tissue culture and the pots just sort of went together. Everything went together really well."*

"And then the AHS started to take off." Warren Pollock became the *Hosta Journal* editor and color pictures were featured for the first time in 1982. *"So that was one of the big reasons to join the American Hosta Society - for the color pictures, and there weren't a lot. And all of a sudden we got members from all over. We became a real national, international plant society. And so there was a mechanism to disperse all of this information about hostas that we didn't have before nationally..and everybody had to have it. So those three things were all in place."*

By the late 1970's, Paul Aden had amassed a large collection of hostas, and in 1979, he signed a contract with Klehm Nursery to tissue culture and market them. *"Aden was very good at marketing. Think about the names of the plants: H. 'Sum and Substance' - what a great name!"* This was the first group of new hostas that were marketed nationally and internationally.

Putting these four elements together - hostas mass-produced in tissue culture labs, grown in pots, mass-marketed as they had never been before, and the fast growth of the American Hosta Society through the improved *Hosta Journal* - transformed the hosta industry.

(The full-length article is available in the eNewsletter.)

ROHS Garden Tour

Dean and Helen Groeneveld

"Dean & Helen's Hide-a-way-garden"

By Helen Groeneveld



Helen emailed her questionnaire responses for the Summer Tour article on the afternoon of Sunday, March 13, 2011. She passed away two weeks later on Sunday, March 27, 2011. The joy and delight hostas and their gardens gave her is apparent as she remembers and lovingly describes them.

The Groeneveld's began "Dean & Helen's Hide-a-way-garden" 20 years ago on their ordinary-sized, 70' x 120' city lot, and chose the name "because we started out in the back yard and had no plans to migrate to the front yard in the future". They began collecting their 473 hosta cultivars in 1994.

"Dean's heart is a Farmer's Heart. His mother did a lot of flower and vegetable gardening while he grew up. My mother's gardening was limited to vegetable. However, her dear friend, Muriel, was an extensive flower gardener so when we visited, we spent a lot of time "out amongst the daisies" enjoying what we couldn't enjoy of our own in town.

"When we built our house in the country in 1969 (in the side of a hill, no less), we became more aware of landscaping and creating garden areas, evergreen tree areas. (I used to buy Dean an evergreen every year for his birthday.)

"Then, it finally came to us - we needed something more than a Russian Olive tree on the south side of the house. May the hosta world forgive us for breaking all the rules and doing all the wrong things when it came to Hostas. Nevertheless, hostas are forgiving.

"Upon moving to town in 1989, somehow we gradually became acquainted with various gardeners. Gene Latimer comes to mind. He lived close-by so we would stop by frequently on our way home from Sunday evening church to admire his hostas. Apparently the hostas crept their

tentacles out, and we had no clue we'd been entwined and captured. At the same time, a co-worker of Dean's began influencing him to join the Marshalltown Garden Club, and we began to see the enjoyment of gardening challenges. All along, I haunted Swift's Greenhouse for whatever.. seeking learning experiences with new plants. However, the hostas never gave up motioning and begging to be taken home.

"Hostas collected me. We began attending Hosta Conventions, and the more we viewed, the more we just had to have. Also, the garden tours opened an exciting challenge for creation in our own garden.

"Just recently, I finally located three hostas which I had coveted for at least 10 years having seen them at Hosta Conventions. However, the plants just never seemed to come on the market 'til now. Hosta 'Seventh Heaven', H. 'Northern Mist', and H. 'Pinwheel' - a miniature. These are such striking plants that no garden should be without them. Otherwise, most any hosta in the collection is my favorite whenever viewing it.

"The past two years, I've become quite fascinated (along with Shirley Halverson) with miniature hosta gardens. Therefore, we had formulated plans to build an extensive collection together. When I get started designing a miniature garden, I just can't quit. My imagination runs wild with all the props I glean from haunting Goodwill and Salvation Army thrift shops.

"I guess not a real mentor. I try to keep up with garden articles, garden magazines and conversations with other avid gardeners. At the same time, I endeavor to mentor my granddaughters and great-granddaughters/sons along with teaching how to create dish gardens plus decorative ideas to work with plants.

"Being's I've been fascinated with castles since our tour of Europe in 1984, Dean has constructed miniature castles to watch over the gardens. We also have a fish pond with many tame fish that race to the north side of the pond to be fed each morning the minute they sense I'm near. They also

swim up to be petted and suck on my fingers.

"Being's our Serviceberry Tree decided to depart its garden life this year, we've finally agreed not to cut it down. Rather, we have elected to leave it as an artistic feature so the bare branches can be used to filter the sun. I'm sure by summer one of us will come up with something specific.

"We also have several metal art pieces: the fly-wheel from our son's '76 Chevy, a tractor fly-wheel plus a boat propeller make a flower arrangement. Two big black speaker covers join the daylilies.

"We have a sitting room with white metal furniture, bird bath and stone walk leading in to sit amongst the hostas. We also suspended a swing from a sturdy branch, a favored hideout of mine. There's also a bench along the pond for fish watching as well as a bench awaiting under the lilac bush for meditation. Our water garden is here too.

"There's a fountain on the east of the house to brighten the sun patch of daylilies. The front-of-the-house hosta gardens meander around directing where to explore by way of stone walks. We also have a collection of Elephant Ears (all may not be out this year) and Castor Bean Trees.

"Dean also has a passion to create hypertufa leaves and planters plus anything else he can commit to perlite. Our latest inspiration is to cover balls, cut out the front, use as planter, enjoy. I hope God allows me time to see one completed.

"Of course, now, the constraints and challenges have to be laid aside because of the sudden appearance of incurable, metastasized lung cancer discovered when I thought I was having a heart attack in January. Where it came from is a mystery as I was never a smoker or involved in any sort of risky lifestyle. It is an incurable cancer so my days on earth are limited, but I've vowed, along with the family to make the best of the days God has allowed me. My youngest daughter, LuAnn Lawrence, insists I'll be here for the tour.

"I have gained much comfort from The Bible:

"Fear thou not; for I am with you. Be not dismayed; for I am your God. I will strengthen thee; yea I will help you with the right hand of my righteousness. For I, the Lord God, will hold your right hand, saying unto you, Fear not, I will help you." Isaiah 41: 10 & 13. "My future garden plans depend on God's timing for my Graduation Celebration into heaven."

Dean and Helen are members of the Marshalltown Garden Club and the Central Iowa Daylily Society in addition to being Russ O'Harra Hosta Society members since July 9, 1995. *"Gardeners are always delightful people to get together with. We always enjoy learning about each other's projects and never tire of visiting each other's gardens for yummy pot-lucks and dessert nights."*

Anything you can't grow that you would like to? *"Again, I must leave that in the Lord's Hands. H. 'Embroidery', our Schubert Cherry Tree, a better specimen of H. 'Spilt Milk' (we just can't seem to find a happy place for it).*

"I discovered a hosta of reverse markings growing out of the center of H. 'Great Expectations' three years ago; such a vigorous hosta that it nearly smothered H. 'Great Expectations'. I planted the mysterious hosta in another garden. It's thriving and content; looks to be somewhat of medium size so I simply gave it a name - 'MY LITTLE LADIES' - after all my little great-granddaughters."

Best resources for learning about hostas? *"Hosta conventions; visiting other gardens; comparing notes with other Hostaholics; attending ROHS meetings and Garden Tours; studying through Bob Solberg and Mark Zilis; newsletters; garden magazines: "Iowa Gardening", "Horticulture", "National Home Gardening", "Garden Gate", "Country Gardens", and "Green Prints"."*

If you had the opportunity to start your garden over again, what changes would you make? *"Not sure that I would. However, the second time around should be easier. We have reworked our northeast garden over at least three times. Hopefully, we got it right in 2010."*

ROHS Summer Tour Directions

The day has finally arrived... Sunday, July 17th, the day of the **Russ O’Harra Hosta Society Summer Tour**. You have washed and gassed the car; you’ve loaded up your lawn chair, packed your sunscreen and on the front seat is the check list of items to spot along the route. Keep in mind the directions provided are **ONLY** from the first garden to the last garden. Directions to Don Lovell’s garden will depend on from where in Iowa you originate and will be your responsibility. Don lives south of Le Grand, Iowa, and Highway 30 is a point of reference when you look at your map. The only garden in town is Dean and Helen Groeneveld’s ‘Hide-a-way-garden’. Be prepared for some gravel roads and if you rely solely on your GPS, it MAY take you down more gravel roads than the directions provided (Google). The time savings is nil. Mileage noted in parenthesis is the APPROXIMATE distance you will travel to the next turn or the garden destination.

Note: For those coming from south central Iowa heading north on Highway 146, if you are going to rely on a GPS to get to Lovell’s garden, please note that 275th Street does **NOT** connect (east) to Highway 146. You must continue north to 260th Street, turn east (right), then south (right) onto Zola Avenue to 275th Street. **GPS and Mapquest instructions are incorrect.**

There are plenty of places to make a pit stop in Marshalltown and a portapotty will be available at the Halverson’s. Travel time between each garden is a little over 20 minutes.

OK, Road Trip Hosta Warriors – START YOUR ENGINES!

Garden #1 - Don & Mary Ann Lovell - 8:00 AM

3352 275th Street, Marshalltown, IA

Garden #2 - Dean & Helen Groeneveld

605 Roberts Terrace, Marshalltown, IA

Garden #3 - Teresa Vokoun & Ed Siems

1351 Prairie Avenue, Marshalltown, IA

Garden #4 - Dave & Shirley Halverson – 12:00 - 12:30 PM 2031 Vance Avenue, Marshalltown, IA

**** Halversons will have plants for sale ****

From Lovell’s to Groeneveld’s – approximately 13 miles - about 22 minutes

1. Head west on 275th Street toward Zola Ave. (gravel) (short distance or SD)
2. Turn **right** on to Zola Ave. (gravel) (1.5 mi)
3. Turn **left** onto 260th St. (.5 mi)
4. Take the **1st right** onto Hwy 146/N. Zeller Ave. (2.5 mi) towards Le Grand
5. Turn **left** to merge onto Hwy 30/W. 240th St. and continue to Marshalltown (6.5 mi)
6. Take **Exit 185** for Hwy 14 towards Marshalltown Business District (.3 mi)
7. Turn **right** onto Hwy 14 N./S. Center St. (.9 mi)
8. Turn **left** onto W. Southridge Rd. (.5 mi)
9. Turn **right** onto S. 6th St. (.1 mi)
10. Take the **2nd left** onto Roberts Terrace (SD)

Destination Address: 605 Roberts Terrace ‘Hide-a-way-garden’ is on your **right** - a gray house with a big front picture window.

This is a residential neighborhood.

Parking is on the right side of the street only.

From Groeneveld’s to Vokoun & Siems’ – approximately 12 miles - about 23 minutes

1. Head east on Roberts Ter. toward S. 6th St. (SD)
2. Take the **1st left** onto S. 6th St. (short distance)
3. Take the **1st right** onto Westwood Dr. (.5 mi)
4. Turn **left** onto S. Center St. (2.0 mi)
5. Turn **right** onto E. Main St. (.3 mi)
6. Take the **3rd left** onto Hwy 14 N./N. 3rd Ave. and continue to follow Hwy 14 N. (5.2 mi)
7. Turn **left** onto Hwy 330 W./160th St. (1.7 mi)
8. Turn **right** onto Prairie Ave. (gravel) (2.3 mi)

Destination Address: 1351 Prairie Avenue

You will see a thicket of spruce trees on your **left**. It is best if you **park on the road** and walk to the gardens as there is only space for about 8-10 cars in the actual driveway (which you cannot see from the road). Please leave those spaces for anyone who may have difficulty walking or shortness of breath. Turning your car around in the drive may be tight.

Note: If you rely on your GPS, it may direct you to Hwy 330 and have you come back south. This will work; however, if you do, we’ll have traffic going

(Continued on next page)

ROHS Garden Tour

Dave and Shirley Halverson

"Turkey Ridge Daylily and Hosta Gardens"

By Shirley Halverson

Welcome to our gardens. Dave and I bought the 5½ acre property in 1974. Then over the years transformed the tangle of brush, with a deep ravine in the middle, into the gardens you see today with the terraces and structures galore.

We have rock-lined island beds filled with hosta and raised beds with daylilies. Blue Spruce trees are the background for the rock-lined beds that include two arbors, a garden fence accented with garden tools, and several birdhouses.

Wagon wheels, tall grasses, and Russian Sage compliment the numerous cultivars in this garden. A large variety of companion plants, yard art, beautiful trees, and a large expanse of lawn complete the landscape. All of our plants are well-displayed with engraved metal tags.

We have always had a garden, starting with two wheelbarrows full of iris given to me by one neighbor and daylilies by another. However, another neighbor pointed out that I needed something for the large amount of shade that we had and gave me some hosta.

The biggest influence was Helen Groeneveld that I met at our Central Iowa Daylily Society meeting. Helen asked us to go on a hosta garden tour about eight years ago and I started collecting that day.

After we accumulated so many plants, we decided that we needed to start selling some because you just can't throw a nice plant away. We were having tea at a neighbor's discussing a name for the garden. She came up with the name "Turkey Ridge" because of all of the wild turkey that pass through here daily.

"We are open every day from noon 'til dark all year, but would like people to call in advance. If people choose to just stop by, it's at their own risk. (<http://lilies4you.com/>) We have lived at this spot

since 1974 and have always had a garden of sorts, but didn't get into collecting until about 10 years ago with daylilies and hostas only about 6 years."

My husband and I enjoy belonging to the American Hosta Society, the Central Iowa Daylily Society, the Central Iowa Valley Iris and Daylily Society, and the Marshalltown Garden Club.

We are looking forward to your visit to our garden.

The Halverson's garden will be the setting for the wedding of their granddaughter the weekend before the Russ O'Harra Hosta Society Summer Garden Tour and Auction.

ROHS Summer Tour Directions

(Continued from previous page)

in both directions and it will create a big bottleneck. If everyone follows the directions above and parks as suggested, there will be less of a hassle when leaving and everyone will be heading in the same direction. Trust me on this one!

From Vokoun & Siems' to Halverson's – approximately 17.5 miles - about 25 minutes

1. Head east (straight ahead) on Prairie Ave. toward 130th Street; road curves and takes you north (2.4 mi)
2. Turn **right** onto Marble Rd. (1.5 mi)
3. Turn **right** onto Hwy 14/S. Sanford Ave. and continue to follow Hwy 14 S. (9.7 miles)
4. Turn **left** onto E. Main St. which turns into Main Street Rd. (3.4 miles)
5. Turn **left** onto Vance Ave. (gravel) and continue up hill (.5 miles)

Destination Address: 2031 Vance Avenue

Halverson's garden is on your **left**. There is plenty of parking. Follow the crowd.

Note: If you rely on your GPS for this section of the route, it may direct you on a shorter route; however, you will travel on 5 to 7 miles of gravel road with several turns. Additionally, you may be advised that you have arrived at your destination when you really haven't. You'll need to continue further up the road.

ROHS Garden Tour

Teresa Vokoun and Ed Siems "Asher Creek Haven"

By Teresa Vokoun

Our gardens and home are named "Asher Creek Haven". We are located in Marshall County at 1351 Prairie Avenue, Marshalltown. As you guessed, Asher Creek flows through our 40 acres and continues downstream to the Iowa River. We consider this our haven away from the maddening world. We purchased the property in March of 1998. It was some tilled acres and mostly pastured acres purchased from the Charles and Mavis Hibbs farmstead. There were no buildings, no home, and no improvements when we purchased the land. We now have 17 acres of mature evergreens, vineyards, a prairie, three ponds, a marsh, our home and workshops, vegetable, daylily and hosta gardens.



Hosta 'On Stage' - front and center.

As we had mature oak trees in the area we built the house, we had quite a bit of shade to landscape. Thus began our hosta love affair. We really didn't start "collecting" until several years later thus I have a large number of unlabeled hostas. I would love to have some help identifying some of the older specimens. We probably have 200+ hostas spread around the house gardens. I have many favorites, but three come to mind: H. 'June', H. 'On Stage' and H. 'Praying Hands'. H. 'June' is always well-behaved, perfect in form and configuration. H. 'On Stage' is just so eye-catching and showy. H. 'Praying Hands' is so unique in its shape and form.

Our living areas are built on the edge of a slope down to the creek. We have had to build terraced garden sections in order to make gardening

easier. Another feature of our gardens are the raised beds my husband built to ease the gardening chores for my arthritic knees. My gardening stool and I travel together all summer over our gardens.

Photography is one of our hobbies besides gardening.

Photos courtesy of Teresa Vokoun and Ed Siems.



Although new beds seem to keep appearing, our gardening constraints are always the same: time and money. I tell my husband we have to quit adding more beds because as we are getting older, it is just the two of us taking care of our place. We have to quit getting these brilliant and beautiful ideas for new garden features. I am still holding out for the addition to the gardening shed - a glass paneled potting shed where I could cold harden my seedlings before planting. In the last year or two, I have started dabbling in hybridizing daylilies. Who knows... maybe hosta hybridizing is around the corner.



We are now members of the Central Iowa Daylily Society. If we had been members of gardening clubs when we started our little haven, we probably would have done many things differently. However, we can't regret too much because it has been an adventure and a great learning experience for both of us. We love to share our gardens with the organizations we are members of or that we know.

I SPY



ALONG THE 2011 ROHS GARDEN TOUR ROUTE

It has been said that life is a highway. Well, the ROHS Summer Tour's highway route will not only lead you to four wonderful gardens, but it will also take you past some interesting spots on the map. To enhance your driving experience, locate the items below along the route and you could win a fantastic prize. Before you leave, take a moment to read through the items to look for as you make your way from Don Lovell's garden all the way to Dave and Shirley Halverson's garden. All the items are in order of the suggested route. Submit your answers at the Halverson's garden and if your findings are correct, you'll be eligible to win one of four prizes to be given away before the auction.

You must be present to win.

Name: _____

Please print legibly

1. What is the name of the cemetery in Le Grand?

2. Pioneer Days in Le Grand is held on which weekend in August?

3. What animals can be found outside the First Rate Real Estate office?

Note: You're travelling north on South Center Street in Marshalltown

4. What is the "condiment" street name where First Rate Real Estate is located?

Hint: The condiment is also used in a popular adult beverage

5. Name the bright color of three houses you spot along South Center Street?

Hint: Would be appreciated more in Iowa City

6. Name of the western "state" street just as you pass over the viaduct in central Marshalltown.

Hint: What happens in this town stays in this town

7. How many runways are there at the Marshalltown Airport?

8. What is written on the water tower?

9. What crops are growing in the fields as you head south on Highway 14?

10. What is the name on the Halverson's sign in their yard?

Hint: It has a type of bird in the name

TURN IN YOUR ANSWERS AT THE HALVERSON GARDEN



Eve Vanden Broek and Marlys Anderson work the new garden stone into the ground at the Russ O'Harra 'Pocket' Garden planting on Saturday, May 21, 2011.

Checklist for ROHS Summer Tour:

- Directions to gardens
- 'I Spy' game
- Lawn chair
- Hosta/plant donation(s) for auction*
- Sunglasses
- Hat
- Sunscreen
- Bottled water
- Mosquito repellent
- Umbrella/rain jacket (if rain is predicted)
- \$\$ to purchase hosta at auction
- Notebook and pen
- Hand sanitizer
- Cell phone

***Drop off at Lovell Garden**

PLANTS MUST BE LABELED

Summer Tour Lunch:

The summer tour lunch will be catered by Hy-Vee of Marshalltown. The cost per person is \$10.00. Vegetarian sandwiches will be available. Please send a check for the cost of the lunches you and your party will need to ROHS Treasurer, David Dettmann, by July 10th. Thank You.

**David Dettmann
122 Bluegill Ct.
Pella, IA 50219**

Joan O'Harra
Burke and
Rosanne
O'Harra after
arriving at the
Russ O'Harra
'Pocket'
Garden
outside the
Principal
building where
Rosanne once
worked.



All Russ O'Harra 'Pocket' Garden planting pictures taken by Eve Vanden Broek and Randy Craft.

2011 Dates to Remember

July 7-9, 2011

MRHS Convention in Madison, WI

http://www.wihostasociety.com/html/2011_convention.html

Sunday, July 17, 2011

ROHS Garden Tour & Auction

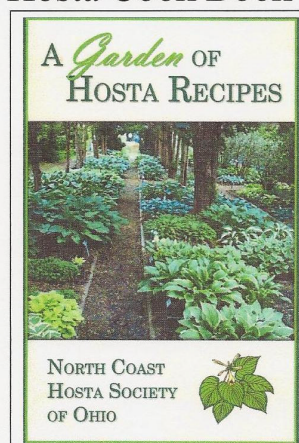
Marshalltown, IA

Sunday, October 9, 2011

Fall Meeting

Neal Smith Prairie Life Center, Prairie City

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Ken Harris

‘Get Your Picture on the Cover of the *Hosta Journal*’

An overview of digital camera technology and basic photographic techniques in your garden.



By Reldon Ramsey

AHS Online Photo Editor, Ken Harris, of St. Charles, IL was the speaker at the ROHS Spring Meeting on April 17, 2011.

This article previously appeared in the Spring 2011 issue of the Midwest Regional Hosta Society newsletter, *Hosta Leaves*.

No talk Ken Harris gives on photography is ever quite the same as the previous one. He allows questions and interaction with his audience to determine the direction each presentation takes. Often that direction is influenced by the number of photographers using digital point-and-shoot cameras and those with DSLR cameras. His hope is that everyone could take away at least one thing from his talk to improve their photographs.

The title of his presentation – ‘Get Your Picture on the Cover of the *Hosta Journal*’ - came about because “What do I have to do to get a picture in the *Hosta Journal*?” was the question he was asked most often after becoming photo editor of the AHS website and Online Journal.

Ken’s first suggestion for all photographers: **READ YOUR MANUAL!** Most people do not take advantage of their camera's capabilities because they never take the time to find out what their camera can actually do.

The reason a 6 megapixel DSLR camera has better picture quality than a 10 megapixel point-and-shoot camera is because the size of the pixels is larger and stores more data. It is also more effective in different light situations.

He noted that the best contributor he has for the AHS website and Online Journal does not have the best camera, but always uses a tripod and is excellent at composing the elements of a picture.

A ‘good’ shot means different things to everyone, but Ken’s definition is when there is as much detail in the highlights as there is in the shadows. This is known as dynamic range.

4 elements comprise Ken’s ‘Photo Square’:

Aperture (Depth of Field)
Shutter Speed (Blur)
ISO (graininess)
White Balance (cast)

Aperture and f-stop refer to the same thing, and determines the amount of light allowed into the camera’s passageway. Aperture also controls the depth of field and determines how much of a picture is in focus. With larger aperture settings, the f-stop number is smaller, and focal distances are closer and produce a shallower depth of field.

Fast shutter speeds stop action while slow shutter speeds can suggest movement. Very slow shutter speeds can be used for both correct exposure in low light settings and dramatic effects.

ISO refers to how sensitive the image sensor is to the amount of light. Set your camera to ‘Auto’ or the correct setting for the amount of light present for each picture.

White balance (WB) is extremely important to get the colors right in a photo. The whites must be white in a photo or all of the other colors will be off. If incorrect, white balance can create green, orange, and blue casts.

‘WHIMS’: 5 checks before taking a picture

- W:** White balance check
- H:** Highlight warning turned on
- I:** ISO check
- M:** Mode check
- S:** Size.

Ken stressed ‘the rule of thirds’ in composing the subject of a photo so that it is visually appealing. Having the subject of a photo in the center of a picture with everything around it symmetrical is not best for overall effect. Imagine a grid over a photo subject. Two evenly spaced parallel lines horizontal lines are intersected by two evenly spaced vertical lines. Place the subject on one of the four places where those lines intersect. Remembering this is essential when editing and cropping photos as well.

Photographing hostas from the top down is boring. Try to shoot a photograph from an interesting angle to showcase the features of a hosta. Several of the images Ken shared were taken while he was laying on the ground with his camera on a tripod.

Never buy a point-and-shoot camera based on its digital zoom. Optical zoom is the important number.

For point-and-shoot camera owners, Ken suggested taking a picture of the same subject on all of the pre-set camera settings to better understand what each setting does. Settings are built-in for light, distance, action, etc. Using the automatic setting is preferable to using an incorrect setting for point-and-shoot photographers.

Always take photographs with the highest resolution setting possible on any camera. The larger the number of megapixels a camera has, the better the images it will produce.

Bokeh is a technique photographers use to enhance the subject of a photo while everything in the background is softly blurred. This creates the illusion that the

background is far away when it may be only inches from the subject in focus.

Post processing and sharing a photo is just as important as taking the picture.

Digital images can be stored several ways. When stored as a TIFF, an image is stored fully as a lossless file. When an image is stored as a JPEG, not all of the image is stored to reduce overall size. These files are known as lossy files. Each time a change is made to the original file, more information is lost. Ken’s advice is to save the original file in unaltered form in a separate location on a computer’s hard drive, back up all photo files, and make a copy of the original file. Each time editing changes are made, use a copy of the original – NOT the original.

When an image is saved in RAW form it is direct from a DSLR camera’s image sensor and hasn’t been processed. It is the purest form of an image with a wider dynamic range and if stored properly, loss of information is minimal.

Ken incorporated many beautiful photographs he has taken in his neighborhood and garden and on an Alaskan vacation to illustrate many of the principles and concepts he shared. He also included several striking images of bold-patterned, colorful quilts his wife, Lori, has created. He concluded with his best photograph taken this year – his 5 year old grandson holding his newborn brother.



4 ‘Hosta Amigos’ in the Ken Harris garden at the 2008 MRHS Convention Tour. Left to right: Reldon Ramsey, Dave Bowe, Bruce Van Wyk, and Ken Harris.

“A Mudhole Made Us Do It”

By Helen Groeneveld

Helen Groeneveld included four versions of an article she had written about “Dean & Helen’s Hide-a-way-gardens”. No dates were included, but the number of hostas in their collection kept increasing - first 243, then 300, and finally 440 with miniatures as her current hosta fascination in the last version. I selected the 2nd article as most representative, but I’ve included paragraphs from the 3rd and 4th articles that contain details not in the others.

“Don’t tell me, let me guess—you must be hostaholics!” We simply reply, “A mudhole made us do it.”

We moved to our present home in December, 1990, only to discover the following spring that we owned a hopeless mudhole, spread, with no apologies, the length of the patio. Two immense maple trees provided dense shade while an ill-placed privacy fence locked the area into muggy dampness. Removal of the fence brought airiness plus ideas of filling the area with a garden - but what? We knew with all the shade, very little would survive, except - why not hostas? We’d had a few undulatas at our former home, but little did we realize when we started planting that a vast world of hostas was waiting out there to hook us. By 1994, we were searching in earnest for those just right hostas we just couldn’t live without which led to more searching for those just right hostas we just couldn’t live without. And, of course, every new hosta required a new space, until we suddenly found ourselves with a dug-up yard and, over the years, the proud parents of 300 fascinating hostas!

However, our tastes for the non-descript, inexpensive hostas of that time, gradually morphed into that of *ravenous Cadillac cravings*, with passions for the *different & unusual*, twenty years later. Unwittingly, we had graduated from hors d’oeuvres, munchies & canapés into *prime rib, caviar & blooming onions*. We have something like 440 *different* hostas. Our latest passion is miniature hostas which we are displaying in all sorts of artistic ways. (Version #4)

We also became interested in daylilies, lilies, astilbe, coneflowers, ferns (a Tatting Fern, our favorite), clematis, asarum, hens and chickens, Heuchera plus

many other perennials to balance our gardens with texture, color and various shapes, sizes and forms. Two years ago, we introduced several different grasses to perk up corners and add winter interest as well as adding Russian Sage to our latest daylily patch. Of course, our pond always creates enthusiasm where canna, elephant ears, water lilies, water hyacinth, arrowhead, sweet flag & parrot feather are featured along with our pet fish. We also have a water barrel garden filled with cannas, sweet flag, parrot feather and water mint. One lonely fish patrols this garden with an occasional assist with Snoodles, the cat, peeking in while Simba, our Lhasa, patrols for rabbits and grinnies.

Eventually, through the encouragement of several daylily enthusiasts, we became interested in daylilies to plant in the sunny areas of a yard that was fast disappearing into various garden plots. However, we’ve elected not to hybridize, only to enjoy the daylilies as a colorful, fascinating part of the overall gardening experience. We’ve planted daylilies, not only in their own plots, but amongst other sun loving plants as well. (Version #3)

Our various gardens are also decorated with large urns, smaller pots and hanging baskets all filled with plants Dean has raised over the winter as well as sporting cannas, elephant ears, caladium and sweet potato vines, the bulbs of which are retrieved from storage every spring. (Helen is in charge of keeping the water plants happy during the winter.)

We’ve also used a variety of artwork as accents in the garden. You’ll be welcomed by a scrap metal cat; note a fly wheel from a ’76 Chevy turned clown-faced flower (another fly wheel and a propeller complete the bouquet): two speaker screens are vigilant in the cone flowers while a super colossal praying mantis resides in the daylily patch. Various plaques, stepping stones leading to intimate garden walks, wall hangings, benches and a swing are scattered throughout the gardens. You’ll even find a giant bumblebee and perhaps, run your fingers across its chimes.

Since we’re both retired and used to busy lives, gardening seemed a natural - especially raising hostas with all their diversity. We enjoy our garden and love to share its enchantment with others.

Hosta College/Bob Solberg: How the Hosta World Has Changed in the Last 30 Years

"The reason I picked 30 years is because it's my 30th year selling hostas which is kind of neat. I've now sold hostas for half of my life."

Asking if anyone in the room had been in the business longer, Van Wade replied, "No. I didn't start 'til late."

"Van and Shirley came to North Carolina the first time to see hostas and got hooked in North Carolina."

"Thirty years is a long time to be in hostas. There are obviously people who've been in it longer and are still in it like Peter Ruh and Arlene Savory. They really know what the good old days were like. But I got into it right at the beginning of when tissue culture hit the hosta world. So I got to see what it was like before, and then I've been able to ride this thing that we all enjoy so much now."

"So what was it like 30 years ago?"

Bob wryly commented that since no one in the room was there he could make up a story and no one would know the difference.

Nurseries

"The first thing was that almost all hostas were generally all grown in the ground. Can you imagine going to a meeting and there'd be no vending? There WAS no vending. You'd go to the national convention and there was no vending. The auction was huge. That's the only place you could buy a plant at a National Convention was in the auctions. That really helped the society. Everybody spent their money there, and they fought over plants a little bit."

"Everybody grew them in the ground. They were backyard nurseries at that point."

Thirty years ago most hosta nurseries were actually hosta collections that the owners had been able to accumulate over a number of years. At the end of 1981, there were 214 registered hostas. Approximately 150 species hostas - forms of *Hosta fortunei*, *H. tokudama*, *H. sieboldiana*, *H. crispula*, and *H. decorata* - were industry staples at the time.

*"And the whole society had this 'Species First' kind of mentality. It's the same way it is with a lot of other perennials still. With hostas, we used all these species names all the time, and we wrote them like the species. We wrote *H. 'Fortunei'* with a little 'f', and back then, we had 50 hosta species. In any case, we've gone the other way all to cultivars. So it was a species based industry."*

"It was all in the ground. People had display clumps and every year they would take the display clump, and they would chop it up, and they'd line the little plants out behind it. And you could buy one of those in the row. They'd keep the big clump for themselves. These display clumps never got huge because everybody was chopping them up all the time because there just weren't any hostas around."

"So you'd go visit somebody and you'd be able to buy one. They'd dig it right out of the ground. They thought back then that hostas were really tough plants like daylilies or iris. You dig a daylily and iris out of the ground, shake off the dirt and throw it in a box. Right? They even used daylily labels - the little wooden ones with the wire. They'd put that on around the shoot of the hosta, and you'd get a box full of hostas. Sometimes they'd wrap them up. Sometimes they wouldn't wrap them up. It was a very different kind of thing."

"When you went and visited somebody, usually you stayed all afternoon. You'd probably have lemonade or cookies or lunch. Frequently it was dark when you left, and that's when you bought all the yellow hostas - not that there were many back then. As you know, yellow hostas look really good when the sun is going down. So you bought all of these others, and then it was 'Oh! I've gotta have this one.' It was a daylong adventure to

drive somewhere to one of these hosta nurseries, and usually the nurseries sold daylilies and iris and peonies and hostas were the fourth of that group.

"If you saw a collection that had 200 hostas in it, it was world class back then."

Bob asked the class how many had 200 hostas in their collections, and most raised their hands.

"See – it's nothing to get 200 hostas is it?"

He remarked that a new hosta business just starting now could offer 500 different cultivars because so many are readily available wholesale.

"That's how things have changed. Back then we had trouble getting H. fortunei 'Aureo-marginata'. It was a really hard plant to get wholesale. I was really fortunate one year. I got a hundred. I felt SO good! And they were like gold – you know? You didn't just turn them loose. You sold about a third of them – maybe half of them, and the rest you had to keep because you had to chop them up. That's what it was all about then. Very different."

Mail Order

"It was a mail order business."

Wish lists were started after receiving catalogs in January, but often plants were sold out since the number available each year was very limited. At National Conventions, "Guest Plants" in the gardens had been sent by hybridizers and nurseries to generate interest in new plants. The mail order catalogs were lists of hosta names with prices unless it was marked "Display".

"Which meant: 'You can't have it. It's mine. I've got it. You don't. It's gonna stay that way.' Now if you had visited this person several times, and they sort of liked you, they might go in the clump and cut a little piece off the side. There'd be some little shoot that had waaandered out to the side, and it may or may not have a root on it. And you were so happy to have that little plant!

"Plants were priced based on how fast they increased. So H. sieboldiana 'Frances Williams' although it was a very old plant, it was a very expensive plant because it just didn't increase.

"And can you imagine what the plants looked like after ten years of dividing them? How beat up those poor divisions were? How many knife cuts had been through them? How much rot you had in them? A lot of those plants you took home and they just crashed because we didn't put them in pots then and try to grow a good root system on them. We went home and stuck them in the ground somewhere and tried to baby them in the ground. There was all this literature on how to prepare the soil just RIGHT so you that could keep these things alive. So it was a very different kind of world."

Leaf Shows

"The leaf show at a convention was a huge thing because you got to see hostas and maybe in two or three years you could actually have that hosta so people spent hours in the leaf show writing down names. Today we don't do that. Most people do a quick walk-through, 'that's very nice', (see) who won what, and then it's out the door and into vending. Right? So you had to do a lot of study. You had to really want the plants. They were expensive. You had to really think about what you bought. There was no impulse buying. You couldn't just say, 'I want it. Do you have it?' It was a whole different world."

Color Pictures

"There were no color pictures of hostas. Can you imagine that? In the world we live in today, where everybody has some kind of digital something...? And you can take that picture and instantly send it to anybody you want to in the world. Isn't that bizarre? But 30 years ago there were no color pictures of hostas. And you were very lucky to go to a meeting and everybody had their little photo albums of their garden, and you would sit down next to some little old lady and she would open it up and there was H. fortunei 'Hyacinthina'. Other than that there was no color at all.

"The journal ('Hosta Journal') first had color pictures in 1982 – 29 years ago. So that was one of the big reasons to join the American Hosta Society for the color pictures, and there weren't a lot. And we spent a lot of money in those early years raising money so we could put color in because

color was really expensive. We did it the way that you publish books because publishing back then wasn't computerized either. It took another ten years really to get the computerization of all printing, and then it really was another ten years before it is like it is today. It was very expensive. You could only have the color in certain parts of the journal. But that's one of the things that made the AHS grow.

"I think one of the things that hurts us is we've lost that now. We don't have that draw anymore. You can get color pictures anywhere. You go on the internet, you can 'google' a plant and up comes the picture. And not only that - you can 'google' the plant, and it'll tell you where to buy it and within five minutes, you can see the plant, decide whether you like it, place the order and hope that it's bigger than 'this' when you get it. But back then there was no color at all."

Vending

"Like I said - there was no vending. Klehm Nursery was invited to vend in the mid-80's I think. They were the only people there. And they had little hostas in pots. The first year they were really little tissue culture plants in pots. We really didn't know what to do with them. Do we keep it in the pot? Do we grow it in the ground? We had to learn how to take care of these little things. You take care of these little plants like it's nothing now. Everybody knows how to do that."

Pests & Diseases

"There were also no hosta pests. There was no HVX. There were no foliar nematodes. People talked about slugs, but you know - slugs are slugs. We talked about hostas coming up too early and freezing. That was a problem. It's still a problem. There just weren't any pests. It was a pest-free plant. That was one of the beauties of them. That was one of the things the AHS could say. 'It's a maintenance-free, pest-free plant.' We can't say that anymore can we?"

Now the AHS spends much of its time, energy, and finances on articles and research related to foliar nematodes and Hosta Virus X (HVX) and developing policies regarding them.

"And that's not necessarily very attractive to people coming into the hosta world. We've learned a lot about pests, but it was really a wonderful time then because you didn't have to think about all that. There was virus around in the mid-80's, but virus never scared anybody because it never really went anywhere.

"About 1990, I was one of the ones who first determined what foliar nematodes were, and that they attacked hostas. And I thought it was the end of the world. I really did. And I was very depressed that whole winter thinking that this is the end of hostas. Hostas aren't going to be fun anymore. And because I was so paranoid about it, and because I worked so hard to not have any, hostas aren't as fun anymore. If one of you wanted to give me a hosta, I really don't want it. Not that I wouldn't enjoy the plant. I just can't bring things into my world like that. Everything has to come out of a test tube."

Tissue Culture

"But fortunately tissue culture came along. Tissue culture gave us three things. Tissue culture first of all gave us the ability to multiply slow-growing plants so basically every hosta is the same price. The slow ones aren't really more expensive than the fast ones."

Before tissue culture, slow-growing hostas like H. *sieboldiana* 'Frances Williams' and H. *tokudama* 'Aureo-nebulosa' were expensive because they increased in size very slowly while fast-growers like H. 'Golden Tiara' were inexpensive.

"So what it did - it equalized the playing field. Tissue culture's done that for us which is a wonderful thing.

"It's also given us the ability to sell 'clean' plants because it takes care of the foliar nematode situation. And now with the virus testing they can take care of that too.

"And it's given us a ton of sports. We would have gotten all of these sports eventually, but it goes really slow in the garden doesn't it? Tissue culture has given us all that so that's been really good."

Without tissue culture, the rate of finding sports would be much lower. The explosion of sports has generated a great deal of excitement in the hosta industry. H. 'September Sun' which sported from a tissue-cultured H. 'August Moon' was Bob's first introduction.

"It had a little green streak in it, and I took it out and coerced it over a number of years to form an edge, and we made a plant out of it."

4 Things Changed the Hosta World

"Four things came together to turn us from a lined-out-in-the-soil hosta world to a containerized-vending-crazy hosta world."

Plastic Pots

"The first thing was pots."

Bob's early years in the nursery business were before plastic was invented. With the advent of black plastic pots, hosta growers discovered that hostas grow better in pots than in the ground in a nursery situation. The same isn't true for daylilies, iris, and peonies.

"But hostas are pot plants. So while those other plants are basically still grown in the ground, and their economies are still based around those visits and digging, hostas have become a containerized plant. The invention of the plastic pot has been great for the hosta industry. It really has."

Hostas have become the number one perennial in the United States because they can be grown in one location, shipped and sold in another location.

Tissue Culture

"I talked about tissue culture and what it's done. Around 1980, Mark Zilis had put together a protocol of how to tissue culture hostas."

Zilis had attended graduate school at the University of Illinois where experimentation with the tissue culture process was being done. He then worked at Walter's Gardens before starting his own business. Walter's Gardens' main interest in tissue culture was to create more stock plants

for the field since that was the industry's focus at the time.

"It wasn't until later that Mark Zilis invented this thing called a 'liner' where you actually buy a little plant in a plug. So we had tissue culture and the pots just sort of went together. Everything went together really well."

AHS & the Hosta Journal

"And then the AHS started to take off. It actually became a National Society. When it was formed in 1968, it was sort of like a local club. The only difference was the members were scattered all around, but it acted like a local club."

The bulletins and early *Hosta Journal* articles were typewritten and then copied. Following Alex Summers, Paul Aden had a short stint as editor. Then in the early 1980's, Warren Pollock became the editor, and color pictures were featured for the first time.

"And all of a sudden we got members from all over. We became a real national, international plant society. And so there was a mechanism to disperse all of this information about hostas that we didn't have before nationally, and it was in the "Hosta Journal", and everybody had to have it."

"So those three things were all in place."

Mass Marketing

By the late 1970's, Paul Aden had amassed a large collection of hostas from hybridizers in the United States, Japan, and England.

"And Paul was very much into making it pay, and so he was out shopping around trying to find someone that he could make a deal with that would sell the plants for him. He didn't want to go into the nursery business. He didn't want the backyard garden because he wanted more money than that. He wanted to be big time. He wanted to be really big time! He wanted to be 'Mr. Hosta'."

In 1979, Paul Aden signed a contract with Roy Klehm in which Aden would supply the hostas to be tissue-cultured in Florida, and then sent to

Illinois where a new nursery, Pretty Petals, had been built as a distribution center.

"Aden was very good at marketing. Think about the names of the plants: H. 'Sum and Substance' - what a great name! H. 'Blue Angel'. He was very good at names, and they were sort of the standard kind of nursery names at the time. They're not as goofy as our hosta names now. That's one way things have changed, and I'm somewhat responsible for that. I try to make it a marketable name too. H. 'Shade Fanfare'..it liked the sun, it grew in the shade - all of these things that told you something about the plant. He made that connection with all of these things."

Klehm Nursery put out its first color catalog with Paul Aden's plants in 1983 or 1984. The plants were available retail and wholesale in quart pots. Some plants were only available retail. The plants weren't as big as plants on vending tables now. In addition to all of Aden's plants, classic hostas such as H. *montana* 'Aureo-marginata', H. *ventricosa* 'Aureo-marginata', and H. *sieboldiana* 'Frances Williams' were also included. This was the first group of new hostas that were marketed nationally and internationally.

"It's sort of like when you're the first to do something you get this BIG, BIG swell and that never goes away. Everybody else has to come in and improve on it, change it a little, but we can't do that again. No matter what we do, we can never do that again."

Bob used the H. 'Fragrant Bouquet' and H. 'Guacamole' family of fragrant-flowered hosta sports as a comparison.

"That is one of those things that exploded that's a new thing. You understand that and the impact that's had. Think about that and multiply it."

"And of course the people in Holland immediately saw this and they said, 'If you can do this, we can do it better. And faster. And bigger.' They came over and got a bunch of these plants, and that's why today we still have a lot of Paul Aden's plants in the trade. Plants that should have been gone years and years ago that are really just lousy

plants like H. 'Brim Cup'. Yet you see them in garden centers all the time because the Dutch still have it out in the field."

At the time, there were very few blue hostas other than types of H. *sieboldiana* and H. *tokudama*. Aden introduced H. 'Blue Angel', H. 'Big Daddy', H. 'Big Mama', and H. 'True Blue' which are all still in the trade. There were very few gold hostas available other than H. 'August Moon' which was still fairly new. H. 'Kabitan' and H. 'Gold Drop' were on the market. Aden and Klehm introduced H. 'Gold Edger' which became a standard plant.

Paul Aden's focus was on variegation, and he had learned through Kevin Vaughn that streaked hostas produced variegated plants.

"If you've ever seen a picture of his garden he has variegated liriopie around all the beds, and everything in the bed is variegated. The shrubs are variegated. Everything - the whole thing - the whole yard is variegated. It is not a pretty garden - to my taste anyway."

All of Aden's blue and gold hostas were registered and introduced at about the same time. Bob believes that Aden thought H. *tokudama* 'Aureo-nebulosa' was streaked and began growing its seeds.

"No one had these blue hostas and gold hostas yet, and I think he virtually named everything."

Putting these four elements together – hostas mass-produced in tissue culture labs, grown in pots, mass-marketed as they had never been before, and the fast growth of the American Hosta Society through the improved *Hosta Journal* – transformed the hosta industry.

Bob Solberg came into the business at a time when it was possible to grow everything in containers because of his North Carolina location and the industry shift to tissue-cultured plants.

"We're able to fill that niche and be a source for all of these liners."

"And I did sort of what Klehm did – but just in a different way. I cut out the Paul Aden part of the story. I went directly from the hybridizer to the nursery."

Hostas Available 30 Years Ago

"I made a little list of everything that was registered then which was really easy because there were only 200 of them..and then picked the ones that you would know because of that 214 maybe half of them were plants that never got anywhere.

"Or they were really old green plants. I mean Eunice Fisher registered a bunch of old green plants that I had in 1985 in my garden when I had 200 hostas, but that you guys probably have never had - wouldn't buy now if they were on a vending table. They were cute little heart-shaped-leaf kind of things, but they grew - they grew.

"So these are some plants you might know, and we'll just sort of run through these just for fun. Of course there's H. 'August Moon'. How many of you still grow H. 'August Moon'? It's a great plant isn't it? It really is a great plant and it's one of those mystery plants. We don't know really know the parentage of it. It was just in somebody's garden and they found it and you know I don't know how it happened. We've been really lucky with hostas that way. There's a lot that have just shown up. And hybridizers... even in my nursery, the seeds can just come up like H. 'Curly Fries'. You know it's just a marvelous plant that I can only take partial credit for. We've had a lot of that luck.

"Most of these plants were registered in the 1970's. H. 'Big Daddy' – how many of you grow H. 'Big Daddy'? It's a good plant. It's got a good name. Right? A lot of people buy it for the name, and it grows in the south so it's OK. H. 'Blue Cadet' - that's what got me going in the nursery business, little blue ones. I could chop those things up. Nobody had them. And I had something that Walter's didn't have. I had something you couldn't get wholesale. I could go to the garden center with these little plants. And they loved being in the south, and people would just gobble them up.

I was really raking in the money. But I had nothing in them.

"H. 'Blue Umbrellas'. These are all plants that Klehm and Aden had in the catalog or at least most of them. H. 'Chartreuse Wiggles'. H. 'City Lights' - some of you still grow H. 'City Lights'.

"Aden also went to England and collected some of the Tardianas and brought them back and named some and registered some for Eric (Smith), and they were in the Klehm catalog. And what happened there was they actually replaced my little fast growing blues because without tissue culture the Tardianas would never be anything because they increase so slow. They're moderate. They don't increase fast enough to chop them up. But they wiped the little blue ones out once we got those in because they were so much bluer. You people care more about color than growing things in a nursery which makes perfect sense to me. H. 'Dorset Blue'.

"He had H. 'Fascination' and H. 'Flamboyant' – two streaked plants that he used to create H. 'Fragrant Bouquet' and those kind of plants. He claims to have created H. 'Fascination' from H. 'Flamboyant' which might be true. H. 'Flamboyant' is supposed to be an x-ray-seed-kind-of-thing, and anytime I read x-ray-seed-kind-of-thing, I'm not so sure. But interestingly Chet Tompkins has a plant called H. 'Sunny Smiles', and I know Paul got some plants from Chet. And when H. 'Flamboyant' becomes stable, it becomes H. 'Shade Fanfare'. And it's really hard to tell H. 'Sunny Smiles' from H. 'Shade Fanfare'. So he may have gotten the plant from Chet at some point. Possibly it's just an unnamed seedling. Remember he was out there looking for streaked plants. So he maybe saw this in Chet's (garden) and brought it back, and he named it.

"H. 'Frosted Jade' was registered in '78. Of course, H. 'Gold Drop' and H. 'Gold Edger'. H. 'Gold Regal' - do you still grow that one? It's a nice plant. It's a good hybridizing plant.

"H. 'Gold Standard' was registered in '76. And that was a huge plant at the time. It was the biggest breakthrough that they had seen. A plant

that was actually gold-centered. It was the first gold-centered green or blue-edged plant, and you know how popular those are. H. 'June', H. 'Guacamole' - you can just make a list. Look at the 'Hostas of the Year' - half of them are gold-centered, green-edged plants. So that was the first one of those and Walter's bought a bunch of them from Pauline Banyai. They put that plant in tissue culture, and it went crazy. They got all kinds of things, and you know all the sports that have come out of H. 'Gold Standard' all the way to H. 'Striptease', and then everything past H. 'Striptease' just by putting that in culture. When it first came out of culture it was just a mess. There were green ones, there were yellow ones, there were half-and-halves. I mean it was not worth buying them out of tissue culture for a long time. The thing's just not real stable.

"H. 'Golden Prayers' - most of the one that was in the trade was what we call H. 'Little Aurora'. There was this big H. 'Golden Prayers' controversy. There was a bigger plant too, and I don't know which is the right one because if you look at the registration it could be either of them.

"H. 'Golden Tiara' was registered in 1977, and Bob Savory went out and chopped that thing up, and he had a million divisions of that. And he was going to make a million dollars off of it. You know - a buck apiece. Right? And tissue culture came along, and they took that plant and put it in tissue culture, and they had H. 'Golden Scepter' before he could introduce it. He did name it. He already had it, but they got H. 'Golden Scepter', then they got H. 'Emerald Scepter', they got H. 'Emerald Tiara' - they got a million Tiaras. And for a while, the Tiaras were the rage until the slugs came in and just mowed them to the ground and defoliated them. And that was sort of the end of the Tiaras.

"H. 'Golden Waffles'. H. 'Green Acres' - a big green thing. H. 'Green Fountain'. H. 'Green Sheen' and H. 'Green Wedge' which I think are siblings to H. 'Sum and Substance'. H. 'Grand Master' which is H. 'Christmas Tree' or very similar. H. 'Hadspen Blue', H. 'Hadspen Heron' - Tardianas. The Iron Gates were registered by Van Sellers right in '80-

'81. Klehm didn't carry those, but those plants came about that time, and they were variegated, fragrant-flowered hostas that are still in the trade now that were sort of a breakthrough. H. 'Janet'. H. 'King Tut'. Somebody came to the table today looking for H. 'King Tut'. H. 'Krossa Regal' of course was around. H. 'Little Aurora'. H. 'Little Blue' which was a smaller H. *ventricosa* type of plant.

"H. 'Love Pat'. Do you still grow H. 'Love Pat'? It's funny that we don't have a lot of variegated H. 'Love Pat's. You would think as many of those plants that have been produced that we'd have some with white and yellow centers. You'd think we'd have a nice bright yellow centered one by now, but we don't.

"H. 'Midas Touch'. H. 'Middle Ridge' which is a form of H. *undulata* - remember we have all of these species. H. *fortunei* sported all the time, and they'd name them. The H. *undulatas* would sport all the time, and they'd name them. It turns out it's tetraploid. We didn't know it then, but it's a tetraploid H. *undulata* which is kinda cool. So that gives you an idea of some of that."

Gardens in the Early 1980's

Bob next showed slides of hosta gardens taken at National Conventions around the United States in the early-to-late 1980's.

"Mass plantings - not a lot of bright colors, not a lot of bright blues. You can get a feel for the coloration. Our gardens are much brighter today. You would see a lot of gardens that weren't hosta gardens but featured hostas with conifers."

Slide of H. *montana* 'Aureo-marginata'.

"These are some of the first ones put out.

"That's Russ O'Harra's garden. He had a nice garden at that point. This is H. 'Popo' and this is H. 'Gaga'. See he started the name thing too with some of the little things. This is Russ and this is a H. *nigrescens* 'Elatior' plant (that) eventually got a name for it. I think it's called H. 'Russ O'Harra'. People were interested in things like this because they were very different."

Ken Anderson's garden in Minnesota.

"And you can see - no big clumps, everything's been chopped up all the time."

The Savory garden in Edina, MN.

"Again everything's grown in the ground. These are not in pots - these are raised beds. Everything's in the ground. They have shade structures over them."

"And 30 years ago this is my nursery. We've gone from growing rhododendrons back here to growing hostas and see all of the containers. And it looks like a big thing, but that was it - there was just a little area there. We had 25 different kinds. If we were lucky, we had 25 different kinds. It looks impressive, just that you're looking at the same area over and over."

At the time, gardeners and hosta sellers used metal plant markers and labels made with hand-held 'punch' label makers.

"We wore our hands out pressing. And then we broke those things - I bet I broke 50. You'd sit there all winter and ohhhh..."

"People collected H. fortuneis because there were a lot of them. And we'd spend a lot of time trying to tell them apart." Slides of the H. fortunei look-alikes - H. 'Francee', H. 'Carol', and H. 'Mackwood 22'. "I'm sure you can tell them apart. Believe it or not, I can. I think we looked at hostas a lot more carefully back then than we do now. We've gotten spoiled by all the diversity we have. But people paid a lot of attention to when they flowered, what the flowers looked like, how the edge was different. Are they a little bluer - a little greener? It's something I think we've lost, and I think it's a bad thing. I think we do need to look at our plants more carefully. We have so many of them now - they're more like landscape plants. We look at them more from a distance than close-up. When you've only got 75, you spend a lot of time with them."

The final slides were of Betty Jernigan's North Carolina garden on the National tour in 1982.

"They dug up the whole place and put it on the bus and took it home with them. It was crazy!"

This is a plant she introduced called H. 'Temple Great' - a big plant that's probably no longer in existence. I had a piece of it. We never put it in culture because she wanted to get the big bucks for it. And it just never did for me - never got that big for me. (I had) one of those huge, monster divisions, and it was never right. But that was a really hot hosta that year and people were really excited about it."

Questions & Answers

"You made the comment about H. sieboldiana 'Frances Williams' not showing any leaf burn?"

"We just didn't see it. It was there, but we didn't notice it. The plant was so unique at the time, there was nothing like it. There was no alternative to it, and people were just happy to have one. And we just never looked for burn on plants. Hostas were pest-free plants. They didn't have problems. We just didn't have that kind of view. Somewhere along we all got cynical and negative about our plants. I guess when you get a lot of them you can start selecting the ones you don't (like), but back then we weren't at all. And nobody ever got rid of a hosta, and some of you still never get rid of a hosta. That stayed. Which I think is unfortunate because at some point you run out of room... unless you put them on the driveway."

"When did minis become popular?"

"In the late 1980's, Bill Zumbar wrote an article in the journal about minis. Bill just died a week ago - a couple weeks ago? In it, he talked about plants like H. 'Little Aurora' as a mini. He talked about those little blue plants as minis. He did have a few minis in there, but he was trying to hybridize for minis, and he started that. And Bill, unlike Aden, was never really good at naming plants. H. 'Prince of Aquitaine' doesn't roll off the tongue - especially with a little yellow plant. It doesn't really match. But he was into very flowery kinds of names which is cool, and he never was a very good marketer. I think that's what hurt that. So he created this kind of concept and called himself a miniature hybridizer, and it really didn't catch on until (later)."

"I spent a lot of time with him and saw what he was doing. If he could do it, I could do it. And I went back and created H. 'Cody' and H. 'Shiny Penny' and H. 'Plug Nickel' and then H. 'Cracker Crumbs' came from that and before you know it we had the 'Crumbs'. He never liked those names. He didn't like H. 'Cookie Crumbs' and H. 'Cracker Crumbs' and H. 'Bread Crumbs'. They just really made him mad. And I didn't like H. 'Prince of Aquitaine', but that's what's made hostas so much fun – all of these different names, and all of these different personalities. So that's been cool.

"So that's how it started and what really pushed it over the edge in the mid-to-late '90's was when all of you folks ran out of room in the garden. You all buy big hostas first. Look how popular H. 'Empress Wu' is. People come and say, 'I have no room for this hosta, but I've gotta have one. And I don't want a little piece. I want a big one! I want it huge.' We're all mesmerized by large hostas. If you ever get off a tour bus and you walk in some yard... I remember Lou Horton's yard. He had some of the biggest hostas I have ever seen. I mean they're 'this' tall, and they're eight feet across and the leaves are like 'that'. And you just go, 'WOW!! This is fantastic!' But he has three around a tree, and they fill this whole area. Now how many minis can you get in there? Right? So that's what's happened. People now are buying minis because they don't have room for the big ones. So what we sell now are really huge hostas and really small hostas. Nobody really wants anything in between. And when you hybridize, everything falls out in between. Everything is pushed to the middle. The more you hybridize, the more you get that. So it's kind of an interesting situation I think."

"Bob, when you were talking about the evolution of pots starting out, do you see the point where we'll be required to do more biodegradable type of containers? I have a barn full of black plastic pots, and I don't know what to do with them."

"You can recycle them. They'll make more pots out of them. Or something – decking or whatever they make out of them. The problem with all of these paper pots is they don't hold up very well.

They're fine for bedding plant people. They're fine for the annual trade. They're fine for people like Oscar. (Oscar Cross, owner of Hilltop Farm, a Hosta College vendor.) If you go look at Oscar's plants, he can grow them in those because they're short plants grown in greenhouses. If I take that paper and put it out in my shade houses - three thunderstorms, and it's going to be a mess. Plus the hostas with those big roots are just gonna punch holes in it. And then think of vending, we've got all these paper pots on the table and dirt everywhere. You guys are trying to get this stuff home. We've gone to different kinds of pots and we recycle a lot.

"Walter's now has gone to the liners, and the things they sell are all wrapped in paper, and they're a nightmare. They're terrible. We have to tear all that paper off. And they've played with different thicknesses of paper, and it's really a nightmare. And you'll see. You all got one. Take the paper off the plant. Don't just put it in the ground. Get the paper off that little plant. It'll grow. Those plants grow fairly well.

"Most cities will take those pots in their recycling bins. We do it in the counties we're in. Pots are good. It's too bad because the pots last forever. I have some pots that are 25 years old that I still use. Those first ones – man, they were great! They were thick! I hated to see those go off the table. You can't buy 'em like that anymore. They were good, and they were cheap."



Oscar Cross, owner of Hilltop Farm, Ash Grove, MO, at his Hosta College vending booth.

Hosta College/Bob Solberg:

Advanced Hybridizing 2011: Inheritance of Gold Leaf Color

Bob Solberg has presented an advanced hosta hybridizing class at Hosta College for six years.

"(We'll) cover some of the basics so everyone is on the same page, and then we'll talk a little bit about creating gold hostas. Just some ideas I have. This is a group participation thing. No one has the right answers or wrong answers."

"When you hybridize, you're doing it for yourself. You may think you're producing plants for others, but basically you're the one who is selecting. Please don't ever introduce something that other people like when you hate it. Don't do that. Give it to somebody or plant it in a corner. Don't do that. You'll never be happy... never be happy."

'Gold Gene'

"Producing a gold hosta is the easiest hybridizing trick you can do. You just need to make one cross. So anybody can do this."

"This is the simplistic view, and it works. As we'll find out, hybridizing is much more complicated than this as genetics always seems to be."

Gold hostas have a gene that is both a dominant and a lethal gene producing the gold color, and the other gene of the pair is a recessive, normal, 'wild' type. If there are two 'gold genes', they are both lethal and the plant dies.

"These will come up. They're the most beautiful light yellow-colored plants, and you get two leaves and you're done."

Gold coloring in hostas is due to a mutation of the 'p700' protein in hostas. The gene is a nuclear gene which controls chloroplast development, and causes the gene to be yellow and only slightly photosynthetic or non-photosynthetic.

Crossing a green or blue hosta like H. *sieboldiana* 'Elegans' with a gold hosta like H. 'August Moon'

will give half gold and half green seedlings.

"They'll all live. Really easy. One cross. Now if you get greedy, as we are apt to do, and you go to the second generation and cross the gold siblings with each other... because we all like to make that second cross don't we? Bring out all of that good stuff."

In Bob's experience, a second-generation cross of gold hostas results in one-half gold again, one-fourth green, and one-fourth lethal seedlings. The lethal seeds may or may not germinate.

"It's really hard if you do the math, and I've done the math several times on these to prove that this is true. Sometimes that number is lower than you would expect because the seeds never germinate. They're dead on arrival. So (it's) very simple. That's the basic principal. Now you can all go home and create gold hostas."

"If you want to produce gold hostas, just get a gold hosta and cross it with anything, and you'll get some gold hostas. How many of you have done that on purpose? It works. How many of you have a breeding program for gold hostas? Almost no hybridizers in the world hybridize for gold hostas. Do you know why? You get them all the time on your own. You cross blue things, yellow things... you've got yellow ones showing up so very few people have a program."

'Indiana Bob' Balitewicz: *"I'd like to qualify that a little bit. I do that a lot, but I do it for leaf shape. Not just a gold, but I like the shape of the leaf with the strong gold."*

"I actually breed for gold hostas, because you all breed for variegated so I have to do something else. You get to have all the fun with the streaked plants, and I have to deal with solid colors. It's very nice. So my plants aren't as streaky, but I like them."

He feels he has the advantage though since he doesn't have to use hostas with H. *sieboldii*'s 'bad habits' to preserve the streaks.

Gold Theory

“Any theory that we have to explain the single gene kind of a theory..must explain the color of the plant which we just did. It must explain that some yellow hostas come up green and turn yellow, and some yellow hostas come up yellow and turn green. Some come up yellow, stay yellow, and then go to white. Now how can one gene act three different ways? I don’t know. The answer that’s usually given is that it’s the same gene that’s broken, but it’s broken in a different place. I don’t know if that’s true or not, but any theory we have has to do that. It also has to account for the variation in the shades of yellow that you get. Even out of one cross if you’re breeding for yellow, they won’t all be the same color yellow. How do you explain that? I can’t explain that at all.

“You cross two yellow ones - this one has a gene broken in one place, and this has a gene broken in another place. You put the two plants together... you say maybe we can get something different. Right? But you can’t because you put those two genes in the same plant - it dies. So you’ll either get this broken gene or that broken gene. Yet when you do that, you get different colors. So maybe there’s more going on here than just the one gene, but at least we’re producing a yellow hosta.”

Gold vs. Yellow

“Now I call these plants gold. It is no longer politically correct to call them gold because whoever is smart in plants has decided there’s no such thing as gold color in plants. It’s yellow. I call them gold because gold is connected to this genetic mutation – in my mind.

“We also have yellow color in hostas. There’s a different kind of chloroplast mutation – it’s not nuclear, it’s a chloroplast mutation. We get yellow edges on plants - we’ve all seen that, and that’s different - to me, that’s yellow. You see yellow streaks in your variegated hostas. Some of them start yellow and some of them stay yellow. That’s different than this. That’s maternally inherited isn’t it? You can carry that yellow on from generation to generation to generation because

you’re just pulling..those chloroplasts along with you. I’m going to call these gold hostas. If other people call them yellow - just think gold.

“That’s the basic theory. If you want to read more like they say on NPR..go to these two references..for a good description of what’s going on. Are there any questions about the theory end of it?”

(References are listed at the end of the article.)

“So let’s talk about the gold hostas you can go home and produce. That’s your homework assignment. Do one gold cross on purpose.”

Large Golds

“How many nursery people do we have in here? What kind of gold hostas are we short on? Large. Right? Name some really large gold hostas besides H. ‘Sum and Substance’.”

Class: *“H. ‘Krugerand’; H. ‘Solar Flare’; H. ‘Key West’; H. ‘Sutters Mill’.”*

‘Indiana Bob’: *“They’re my hostas (“H. ‘Krugerand’ and H. ‘Sutters Mill’), but they’re large.”*

“Yea, but your hostas are very similar – right?”

‘Indiana Bob’: *“Right.”*

“And they all burn in the south.”

‘Indiana Bob’: *“I don’t know about that. I don’t go south of 30.”*

“They’re fine north of I-80, but we don’t have a lot of them.”

‘Indiana Bob’: *“No.”*

“I mean we don’t have a lot of them - that’s why you’re making them. We don’t have a lot of large ones so we need large ones.”

Gold Hostas in Sun

“There is a theory that gold hostas are more sun tolerant than green hostas. Right? It’s a theory. It’s wrong, but it makes sense because they need more light. Because remember that one gene

makes broken chloroplasts - yellow/gold chloroplasts - one allele on the gene makes normal. So you're working on half a tank. So if you give it more light, it can photosynthesize more and you catch up. They need a little more light. They need a little more fertilizer. They need a little more everything to make them sort of equal to green plants. But frequently you put a gold hosta in the sun and what does it do? It fries."

'Indiana Bob': "There's a fine line between needing more light and too much light."

"That's right. Unfortunately, unless you grow your hostas in pots with wheels underneath them... there will be that one day when the whole universe comes together to oppose you. And you'll fry the sucker. So what we need is sun tolerancy. That would be nice - large yellow, sun-tolerant hostas. And what everybody wants every time they come to my vending table. They say, 'Does this one stay yellow?'"

"If a hosta comes up very light gold and stays that color all year long, how vigorous do you think it's going to be? Not very. Right? That's what I try to tell people. If it greens up when it gets hot, then that's good, but they don't want to hear that. They want it this color year round. And if it's green in the spring, when you're trying to sell hostas, it's worthless isn't it? That's one of the problems with H. 'Key West'. It's a beautiful plant late in the summer (like) H. 'Solar Flare'. They're just too green when people are buying it. They say, 'That's not gold, that's not yellow. This thing over here is yellow. It's screaming at me - it's YELLOW!! I want that. A big plant like that I can put in the middle of my front yard, and it stays that way all year long. I have annuals and perennials that do that. Why can't I have a hosta that does that?'"

"So those are the kinds of things you would breed for. Those are the kinds of things I have bred for. I have crossed the ones that come up yellow and turn green with the ones that come up green and turn yellow in hopes that something - even though it's against the genetic rules - and I'm hoping that something will work out. You've got to be creative. Just remember this whole thing is just

one gene. You've got 10,000 other genes in the plant. So you've just got to tweak them a little bit to make this work. I don't know..."

Gold H. kikuttii

"Anything else you'd like to see?"

'Indiana Bob': "Leaf shape. I've always worked for a golden H. kikuttii with no success."

"That was the first cross I ever made was to get a golden H. kikuttii. I crossed H. 'August Moon' with H. kikuttii, and I got some but they never grew. They were funny little worthless plants. One cross - you guys if you want to do that take two parents. Something like maybe H. 'Awakening Angel'. It has a nice long look."

'Indiana Bob': "It's an interesting line to get there. I don't think you're going to make it with going 'x' x H. kikuttii or H. kikuttii x 'x'. I think you have to go around the horn."

"So it LOOKS like H. kikuttii. Exactly. Maybe if you take H. 'Awakening Angel' which looks like a H. kikuttii to some extent. It's a big plant and cross it with another big plant like H. 'August Moon'. H. 'August Moon' is an easy plant to use, sets seeds easy. It's got lots of pollen. They don't bloom together so you're gonna hafta save the pollen. But that pollen you can save real easy, and you can slap it on. I don't know how well H. 'Awakening Angel' sets seed cuz it blooms in the middle of summer for me. You guys up north it might set fine."

'Indiana Bob': "There's H. 'Hadspen Sapphire'"

"Not a lot of substance. H. 'Awakening Angel' is one of Frank's (Frank Nyikos) plants, and it's really blue."

Reldon Ramsey: "I think he told me it doesn't set seed."

"So maybe use its pollen. "H. 'August Moon' sets seed. But that's just to give you an idea. You can research your own way of doing it. But that'd be

one thing you can do."

'Indiana Bob': *"H. 'Tidewater' is part H. kikuttii."*

"At least when I crossed H. kikutti with H. 'August Moon', I got some with H. kikuttii leaves. And I got some with H. 'August Moon', and I got all the different bloom times. So I think you can play with that, and if you grow enough seeds..."

'Indiana Bob': *"Roger (Hosta hybridizer, Roger Smith) said that H. kikuttii is so dominant that it's as dominant in hosta as 'Stella' is in daylilies. Whatever you get, you get H. kikuttii."*

"That's not been my experience. I cross it with H. longipes, and I get H. longipes leaves out of it. I get half and half. I get half H. kikuttii leaves and half H. longipes leaves. That's just not been my experience. And it wasn't with the H. 'August Moon' so I don't know."

Big Golds

Herbie Altman: *"Have you done any work with the parents of H. 'Key West' to see if you could get anything by going back a generation?"*

"I'm not sure what the parents of H. 'Key West' are."

'Indiana Bob': *"It's gotta be H. 'High Noon' (or) H. 'Elatior'."*

"I wouldn't go back. I'd keep going forward."

"What you might want to do is take a plant like H. 'Key West', and cross it with some huge H. 'Big John' seedling you have or whatever. Just try to bump it up. You're still playing (with) you know – H. sieboldiana, H. montana and H. nigrescens – all those plants. That's what H. 'Elatior' is - H. nigrescens. (They) are very close genetically. So you're still working on a real little pond. Even if you use H. 'Sagae', H. 'Sagae's not a bad choice, but..H. 'fluctans' is in that same kind of pond. And that's where most of our big hosta genes come from. I don't know any other place where we get big - really big – hosta genes."

'Indiana Bob': *"That H. 'Sum and Substance' line, but that's different."*

"That's H. 'Elatior'."

'Indiana Bob': *"That's debatable."*

"H. 'Blue Angel's got H. montana in it. H. 'Blue Angel', H. 'Guardian Angel' – it's got H. montana, H. sieboldiana. Everything comes from that little group if you're going big. So you can rotate through that group to try. That's how H. 'Millenium' kind of broke the mold because H. 'Millenium' has H. 'Sagae' in it. So maybe use H. 'Millenium'. It sets seed like crazy. I think a big gold H. 'Millenium' with the same leaf shape and everything would be pretty nice wouldn't it? Cross it with H. 'August Moon' - it's got the same leaf shape. It's got the same bloom time pretty much. And one cross you'll get some gold seedlings, keep most of the substance, and in about five years you'll know what you've got. That's the problem with the big ones."

Other Golds

"We also need yellow hostas with a lot of red on them. And that's what I've been doing..because the red looks really good on the yellow. It looks better on the yellow than it does on the green. The plants we're introducing now are the result of..10, 12, 15 years worth of work so you don't have to do it. And I'll show you some of that."

"We also need some gold plants that are like Tardianas. We really don't have any gold Tardianas. We have some gold sports out of H. 'June', but they're not really hybrids. We could use a gold H. 'Halcyon'. Wouldn't that be a nice plant - a bright gold H. 'Halcyon'? That shouldn't be that hard to do especially now that we have our Longianas that I produced, and I have a gold one, H. 'Sun Shower', and again I'll show you some stuff."

'Indiana Bob': *"H. longipes x H. sieboldiana?"*

"Yea."

Gold Minis

"I'll show some of the kinds of things that I think we need, and a lot of the things that I'm trying to create. Big's good. We also need gold minis that don't look like H. 'Kabitan'. You know - that aren't H. sieboldii things. We need some really stiff, cute little minis that are nice and yellow. There's a lot to do. The minis are hard. I mean it's really hard to shrink that stuff down (and) to keep it small."

'Indiana Bob': *"Can you use H. venusta to shrink the minis?"*

"Yea – H. venusta will, but I don't know... I get to a point where all the seedlings get bigger. So you've gotta grow a lot of them and get one that doesn't want to grow or something. But being yellow they'll grow less. We need more substance. We've got to get more substance from somewhere into those plants. Gold H. venusta kind of things - we've got them like H. 'Little Miss Muffet', and they're not really great plants. They're OK, but they're not great plants. We need to get beyond that too."

Gold Origins

"So where do we get these yellow plants, these gold plants to start with? A lot of the plants that people started with were natural mutations in the wild. And I have been told that if you go to Japan, and you tromp around in the woods, you will find some gold hostas – especially gold H. montanas. And that's where we got probably H. montana 'Aureomarginata' and H. 'On Stage' and some of those things. H. 'Chunko Nishiki' we got dug fresh right out of the wild. So that's one thing that happens naturally. This mutation occurs naturally in the wild, and every time it happens, it happens differently you would assume. So you may get a little different color, you may get a little different 'something'. That's one way. That's where I started with my lines with a gold form of H. tsushumensis that was found in the wild."

More Gold Theory

"Sports... H. 'June'. Let me backtrack and give you some more theory. This gets complicated."

The current theory of Dr. Ben Zonneveld is that the cross section of a hosta leaf from a side view would show three layers. The outside, epidermal layer (L1) is the only layer at the ends of a leaf, and covers the rest of the leaf like a glove. Zonneveld has shown ("*..at least to his satisfaction..*") that there is an L2 layer beneath that. In the middle of the leaf is an L3 layer. The L1 and L2 layers are very narrow – just one or two cells thick. The L3 layer has three to five cells.

"The only reason I'm telling you this is the L2 layer is the one that determines the gametes - the one that determines the genetic outcome of the plant. We rarely see the L2 layer. He claims that in H. 'Striptease', the white line is the L2..so just don't worry about that part."

"Traditionally we have looked at the hosta leaf, and the center of the leaf is what we think the children of the plant will look like. If it's a gold center..for me that has always worked. He claims though that it's not the center of the leaf that's important, but the L2. Fortunately the L2 layer is usually the same as the L3 layer. All the plants he's measured..it's almost identical so I think it's safe for us to continue to look at the center of the leaf and say, 'That's really what kind of hosta I'm breeding with'. Not the edge – the edge has hardly any effect on the gametes."

Hybridizing with Gold Sports & Seedlings

"So we have all of these new sports like H. 'June' which is from H. 'Halcyon' which is a wonderful plant, and H. 'June' has a yellow center. You can breed with H. 'June' as if it was a gold plant. It acts just like a gold plant. How many have done that? You get your 50/50. Right? Pretty much. I do. H. 'June' comes up bright and gets dark. H. 'Paul's Glory' comes up dark and gets bright. Pick what you want. What do you want your big hosta to look like? What do you want your little hosta to look like? Go around, pick the plant, and then use that plant. So all of these sports have given us more yellow plants to play with. That's good. It gives us new combinations that we can use."

"We also have new hybrids like H. 'Sun Shower'..a whole new genetic combination. We've not had a

plant like that before. (H. 'One Man's Treasure' x H. sieboldiana) There are other plants that will come out. Look for those because they give us opportunities do things we haven't been able to do before.

"I think the other thing we need to do when we hybridize for gold is to add other colors. Like I said, red or purple on the petioles, but also white wax. H. 'June' is frosty in the spring. Other golds are not so that's something that you need to take into account. Do you want that frosty look or do you want that bright, springy, shiny look? Pick your parents based on that. If there's some purple in the base of the plant, then you can work that up into the leaf over a couple of generations."

Marketing Gold Hostas

"Also, I am now of the belief from a marketing point of view that if you have a really good gold plant, ideally what you want to do is send it somewhere where the first thing they do is put a green edge on it because that plant will be worth more commercially than just a gold plant. Right? Some plants do it quickly. Some plants do it as seedlings. Sometimes. So that would be the first thing to do.

"The second thing would be to get the green plant out of that because sometimes the green plant is a really good plant too. H. 'Fried Green Tomatoes' is a really good plant. We're gonna get a dark green form out of H. 'Sweet Sunshine' that's cupped, puckered, fragrant-flowered. It's gonna grow really well. It's gonna be sun tolerant. It's gonna be a pretty good plant. It's gonna look like a dark green H. 'Tokudama' with fragrant flowers. That's a pretty marketable plant.

"When you have yellow plants, look for the sports. Is it going to try to go green? Is it going to try to make those green chloroplasts and throw them all in the same cells with green streaks? We've had some do it in the seedling trays the first year. Some just want to do it more. It's easier for them to do it when they're little than when they're big. If you think about it, the numbers game is much better. There's less total chloroplasts. There's less cells so it's easier for them to do it. Other ideas to think about..."

Gold Tetraploids

'Indiana Bob': "Changing ploidy question."

"Changing the ploidy seems to make the color darker I think because the cell walls are thicker and the plant is less translucent. The thing we like about the bright yellows in the spring is the sunshine goes through them. And if you've ever tried to photograph them, it's really hard to get that yellow that you see with your eye. You see the light sort of go right through them.

"When you get a tetraploid gold like that... when you look at the center of H. 'Touch of Class', it's not nearly as bright as H. 'June' because the cell walls are thicker. The center of H. 'Touch of Class' is tet as well as the edge, and so I don't think the light can penetrate as well so you get a darker color. Now if you think that's a better color, that's fine. It's just up to you personally. I think that's what we see happen, and the light just doesn't pass through it the same way. I think if you worked on it you could get a nice plant, but you have to work on it."

'Indiana Bob': "What would you use?"

"Your choice. Start big because when you turn it tet that will shrink the plant. Or start small and shrink it to a mini. That might be a way to go."

'Indiana Bob': "Have you seen or worked with H. 'Tokudama Flavoplanata'?"

"I don't think the plant exists. My opinion and I think Mark feels the same way... does anyone have "The Hostapedia" with them? I don't know what he says about (it). Maekewa described it, but I've never seen it. All the plants I saw that were supposed to be it weren't. So I don't know that there is a plant. My understanding was that it was a H. 'Tokudama Aureonebulosa' with a lighter center which would give you lighter gold hostas - that might not grow at all."

Gold Parents

"Let's talk about some parents to use, and let's go back to the species. I always like to - in my mind -

go back to the species because I know the species, and I sort of know what I'm pulling out of there genetically. But I never go back to the species. I go to the newest plant I can find with the combination of species in it that I want. Don't go back and reinvent the wheel. I've worked 8 or 10 or 12 years to create these yellow things by combining all these species. Don't you do it again - for heaven's sakes, start where I am... you might get somewhere. Let's move along.

"So pick the newest plant with the species characteristics you want. That means you sort of need to make family trees of the plant that you're using.

"If you use H. 'Key West', which is a good H. montana-H. nigrescens kind of plant... if you'd go back, you'd see where H. 'High Noon' came from - you'd know where H. 'Elatior' comes from. But you would know you're dealing with a combination of the yellow H. 'High Noon' color - that gene, that broken gene - and you'd put it on a different palette and that's why it's a different color. H. 'High Noon' comes up dark and gets yellower. It works the same way because you've added a different kind of epidermis. You've changed from a H. sieboldiana-H. montana-type to a thicker leaf. I guess it'd be like becoming a tet. The plant is a darker color than its parent. You may not like that. You may want it lighter.

"You start with H. sieboldii plants. A lot of people start with H. 'Kabitan' or something like H. 'Kabitan'. It's a really good plant in that it grows fast, it's bright yellow, it's got some red - quite a bit of red actually - to play with if you want to do that. But don't start there because Lord knows it's got all kinds of other problems that you don't want to have to deal with. Try to find a child of it somewhere down the line. I'd suggest something like H. 'Cherry Tart' although I have not used it. Based on the pictures, it's a newer plant with those kinds of characteristics. So you could start there if you want H. sieboldii in your plant."

"If you want H. longipes... how many of you have used H. 'Designer Genes'? Have you had good luck setting seed on that?"

Class: "OK." "More luck with the pollen."

"For me the pods look weird. A lot of them are short and stubby. I have gotten some of the seeds to grow, but I've had luck with the pollen too. So as far as I know, the thing works both ways. You've got a lot of bad stuff in it. You get a lot of dead ones. It's a weak plant, and it's got some negative things. You need to cross it onto something good to get the vigor and everything back in it. For me, it's really good at putting purple on the scapes. I mean like every time. If you want to turn a scape purple, there's the plant to use. Put it on a real good kind of finished plant."

"The H. yingeri x H. tsushumensis hybrid I produced..H. 'Whiskey Sour' is an F1 - a bigger more robust plant. It does green up more. One of the things I wanted to do in the second generation is to bring in more red. I wanted more yellow. For whatever reason, when you cross siblings in an F2 where you get the 1:2:1 ratio some of those plants are lighter yellow and stay yellow longer. I don't know why. According to what we're doing up here, we can't explain it so something else is going on too. But that's one way to get a plant that comes up bright yellow and then turns green to get it to stay yellow longer is to do an F2 generation with the siblings. That has worked.

"A lot of these new ones we have if you put them in the sun they stay yellow, yellow, yellow until they finally turn white. We've done a good job (making) what people want. We've kept them yellow. You put them in the shade - they're yellow, yellow, yellow. You put them in too much sun, and you can cook them. So it's a fine-tuning exercise after that. So we have H. 'Whiskey Sour'. H. 'Strawberry Banana Smoothie' was the best of the next group. From those as you'll see, we brought in other plants and created better plants. What's interesting though is that when you do a cross, not all of the seedlings are the same shade of yellow or gold. I don't know why. They should be. Gold is more complicated so don't be quick and just throw everything away.

"H. montana - you have H. 'On Stage' which is the one that comes up real late. I've seen a lot of

seedlings out of H. 'On Stage' that look a lot like H. 'On Stage'. You do get some pretty neat plants out of it, but they're slow, and you have to work on it. If you want to go another way, there's H. 'Piedmont Gold' which is a H. montana with maybe some H. sieboldiana in it. But it's a H. montana-like plant - very light gold, grows fairly well, gets big. So again that's something you might want to use.

"As far as H. nigrescens, H. 'Gold Regal's been used a lot. It's sort of the upright H. nigrescens - more H. 'Tenryu' than H. nigrescens. It gives you upright seedlings. Not a real bright color, but..if you work with that, you might be able to work some of that out. Jim Wilkins has some nice seedlings out of that that he's named that you might want to try. You know - skip the H. 'Gold Regal' and use them. H. 'Fort Knox' is a good example of an improved plant out of that group. Use it instead.

"H. sieboldiana - I don't want to use anything that's H. 'Frances Williams'-like because it burns. And it burns really bad for us. And some of your plants are gorgeous, but (ours) just fries. So I like to use H. 'August Moon' instead of H. 'Frances Williams'-type plants. Most of Dick Ward's plants - even though they have H. 'High Noon' in them - they do burn some so you have to be careful with those."

'Indiana Bob': "I grow H. 'Frances Williams' under a willow tree."

Class member: "How about H. 'Paradigm'?"

"H. 'Paradigm' would be a good plant to use. You can use H. 'Paradigm' fine. It's more vigorous. I think that'd be a great plant to use. (It has) more H. 'Tokudama' in it maybe than a straight H. sieboldiana so it might be a little slower."

Slides of Bob's Gold Seedlings

"I get such a kick out of power point. I've never been to a power point presentation where there wasn't a glitch. I mean seriously. I was listening to the tech people... I'll stick with my slide projector."

Five seedlings of a H. longipes x H. sieboldiana (H. 'One Man's Treasure' x H. sieboldiana) cross were crossed with each other, and Bob grew the 800 resulting F2 seeds.

"..cuz that's the way I do things. Some of them were yellow/gold. I don't know how, but frequently when you cross blue plants with blue plants, yellow ones show up a lot of times. I'm not sure how that is unless it's in those plants, and we just don't see it."

Class Member: "Do they stay yellow?"

"They stay yellow. I used to think a bee got in there, but I've done some pretty controlled stuff and every once in a while you've got a yellow one that pops up. Be it the bees or be it the plants, these were the plants that were not blue or green. They were yellow, and you can see all the different shades. Right? Which I thought was very interesting. I watched these plants for a long time. That was the first one I threw away. They all would come up yellow and turn green. This one obviously is a pretty plant, and that turned out to be H. 'Sun Shower'. Another one didn't grow. H. 'Sun Shower' in a half day of sun turns this golden wonderful color. It grows just like the other Longianas. It has a fairly high vein count, it's thick - it's got really good substance. It greens up a little bit. So what I did - because that bugged me - is I'm gonna take this plant and not self it, but cross it to another F2 Longiana and create an F3 cross. And the one I chose was the smallest one I had that had more cupping in the leaf, a really good habit, and it was smaller. And we all want minis. Right?"

Class member: "NO!"

"So I'm taking two fairly big plants and trying to make a mini out of them. So I cross it with that, and I get these."

Class: "OOH!!" "AAH!!"

"You see that leaf shape of the other parent. Now isn't that pretty? I had 200 of these because that's what I do. And I now have six. Anytime one turned

green I reached in and threw it out. I started early in the spring. I got down to these. These are the ones that stay yellow the longest - very heavy substance. I don't know if they're gonna get bigger later, and they're just slow because now we're F3 and we're slowing things down a little bit. But they're pretty little plants aren't they? We'll name one of these just because they're pretty. Even with the H. 'One Man's Treasure' (genes), they don't have a lot of red in them."

Class member: "Did the F1 generation have more red."

"H. sieboldiana doesn't have any so for whatever reason, it's like starting over to introduce the red into the plant. We had one plant out of the 800 that had a lot of red on it. All the rest had some, but not a lot. So it's something that we would have to reintroduce."

Dan Wohls: "Did you do a back cross?"

"I could do a backcross to H. 'One Man's Treasure', but instead I wanted a newer plant so I went to H. 'Designer Genes'. I got the same plant basically, but I got some red on the petioles - but mainly I have beautiful purple scapes that come up with beautiful flowers on them. So instead of the yellow scapes, I've now put (on) red scapes.

"This is pretty easy to do. I mean you make two crosses to make H. 'Sun Shower', one cross to make the other plant, and another cross to get this. So it's just four crosses. So for me the generation of a cross is about three years. So 12 years to do that. I probably did this in 10 because it's a little easier. You guys can do it much faster because you accelerate things. See what we've done. Isn't that kind of cool?"

"Now what do we want to do with this? I might try to make it smaller. I might try to make it redder. I might try to make it bigger again. Put these in TC and hopefully I'll get a green edge on one. And that would be rockin'! Have a green edge on that little baby - a white edge or something."

Joanna Kovalscik: "A RED edge."

"So you sort of see what we're doin' here. And I didn't expect to get H. 'Sun Shower', but once I did, I knew it was a unique plant, and I put its pollen everywhere, and I put everything on it. And therefore we've got several kinds of things out of it that are interesting.

"I don't know that I have a (picture of the) yellow H. tsushimensis plant. (It's a) wild sport of H. tsushimensis that came up yellow and turned green pretty fast. We crossed it with yingeri because they bloom together. It was easy. They're two species that not many people had, and I'm always going off on my own somewhere. The first thing we got was H. 'Whiskey Sour' which as you see, when it comes out of the ground in the spring is a killer plant. And it's fairly big - it's actually bigger than its two parents - which sometimes you get just because of the hybrid vigor. It had a little red on it but I really didn't pay too much attention to it. I think it was registered, and I didn't even put it on the form because we weren't into red as much back then either.

"Crossing it with its siblings, we got H. 'Strawberry Banana Smoothie'. When this thing came up, you couldn't help but see the red. Not purple, it was bright red - so now all of a sudden, the focus changes. We've got a yellower plant and a redder plant, and we took that plant and bred it into a line where we had H. clausa genes. And we pulled the H. clausa red out, and we put it in here and so these plants have H. tsushimensis, H. clausa, and H. yingeri in them. And this is H. 'Smiley Face' and this currently - until my seedlings come up this year - is my favorite hosta. For two more weeks I think. But you can see how we've gotten the red up into the foliage. The leaves I think are very cute - nice and round, heavy substance - and again it's a different colored yellow.

"The seedlings out of this cross - lots of different coloring, lots of different leaf shapes because we brought in a lot of different genes - so out of 25 or 30 plants there were six that were really interesting. H. 'Lemon Ice' is one of them that we're introducing. It's the biggest one for those of you that

want to play with the big ones. This is a sibling – you can see what we’ve done with the red, it’s got thicker substance. It’s not that shiny yellow – it’s gold-yellow. It’s a very sun-powered plant where H. ‘Smiley Face’ you want to grow in the shade. Again – very different when you look at them.

“This one’s not named yet. I don’t name them until I get them back from the lab – just in case. When you make that WIDE cross, and you bring it back again (see) how much diversity you can get from a plant. It’s done this three years. Coming up right now it looks like that. It puts this red on the back of the leaf. It’s not on the front of the leaf. It’s just on the back of the leaf - which is the WRONG side. And it lasts about two weeks, but it’s really cool. When this hosta fully leafs out, it is the ugliest hosta you’ve ever seen in your life. Seriously. You would not buy it. So I gave it to my buddy, Simpson, and we’re going to try to play with it. That just gives you an idea of what they can do.”



Great Lakes Region quilt raffled at Hosta College.

Papercrete bowls at the booth of Lee and Peggy Coates, Peggy’s Flowers, Highlandville, MO.



Bob Solberg at his vending table before Hosta College classes begin.

References:

Vaughn, Kevin 1982. “The Genetics of *Hosta*” **American Hosta Society Bulletin** No. 13, p. 44-49

Zonneveld, Ben J.M. 2002. “Inheritance of Yellow Color in *Hosta*” **The Hosta Journal** Vol. 33, No. 1, p. 49-52



Each year a hosta leaf garden stone is created for Hosta College. The 2011 leaf was Van Wade’s H. ‘American Halo’.

Hosta College/Bob Solberg:

Ask Bob

Attendance at Hosta College has been declining in recent years. 314 people were registered for the 2011 classes.

"There was a time where there was a waiting list. It was limited to 500 people and you could only be in the Great Lakes Region to go. They went to computers and they lost some people, and then they opened it up to everybody. From 500 to 314 is a sizable drop, so bring a friend – it's the best meeting around really other than the national. It's cheap, it's very educational – the cross section of people here is amazing – this is the youngest group that we go to. There are new people coming in all the time. It's really a wonderful thing."

"The way we play this is you ask a question and I'll give you an answer. I will promise to be honest and hopefully not offend anyone, but I will be honest and whatever you want to ask about anything I want to answer the question."

"I was in your class this morning going back to the last 30 years of hosta history. Can you maybe project what the trends might be in the coming years or what you see happening."

"If you haven't got a "Gossip" (Bob's business newsletter, "The Green Hill Gossip") yet we have them at the vending table, it has the 30 years of hostas in it."

"Where we are right now is at a very crucial stage. Just like this meeting's numbers are down, the AHS membership is down. They no longer have the source of information for hostas."

"Thirty years ago they did. They had it all, and in 1982, they finally had color pictures. There were no color pictures anywhere of hostas. Anywhere. No books, no internet – nowhere unless you sat next to somebody and they had their little photo album. That was it. That was the best you could get of color pictures of hostas. The AHS was at the

forefront of that and attracted a lot of members. Now of course you can get color pictures of hostas ANYwhere of any hostas you want. You can take a picture, you can send it to all of your friends. It's a whole different world."

"So I think we're at a crisis point as far as organization. All this new media happened so fast, we have to figure out how to deal with it all. As hosta experts, we have things that we can offer that the internet cannot. Things like this. You can do it on the internet, but I'm not going to do it. People do that. The garden writers have online meetings all the time. So we need to work on that. We need to figure that out."

"As far as the plants, right now I believe there are too many hostas being introduced. What do you guys think? (There was some general agreement amongst the class members.) But how many of you buy everything? Even if you could afford it, you wouldn't do it. I know we introduce new plants and we try to introduce somewhere between 15 and 20 new plants a year. Not all of them are absolutely new. Some have been out a year or two, but they're not widely grown. You guys probably don't have them - like H. 'Electrocution' – most of you don't have it or didn't have it. Most of you will get it in a year or so because it's on our club list, it's on our wholesale list and the liners are coming out, and if you want it, it's a plant you would get it. So we carry some of those. We try to carry several of our introductions every year that are unique plants."

"Naylor Creek introduced 120 new plants this year. How many of you bought all of those? Even if you could afford them, that's just too many. Q & Z – what do they say on their catalog... they've got 43 new things or 50 new things wholesale in that catalog? I mean that's just a lot of new plants being introduced, and the market's just not there."

"So how do we deal with that? There's two ways. Either we stop introducing so many average plants..if it's a spectacular plant - if it's a 'current product' type of plant, it's gonna get a lot of attention and eventually most of you will have it if you like it and it appeals to you. If it's another little white-edged thing that just sits around and

gets 'this high', you might be able to do without it. So basically I think we need to be more selective (about) what we introduce and that means you guys have to stop pushing us to do new things all the time. Because that's why it happened because all you want is 'new'. You want a plant you don't have basically."

"I think it's the other way around. You're always pushing new stuff at us."

"We do whatever you tell us to do. The consumer drives this - the nurseries don't control this. You guys say you like white-centered things, and what do we do? We produce a lot of crappy white-centered plants. Right? Because that's what you buy. That's the way capitalism works. I know it sounds funny, but you guys are in control."

"Like illegal drugs."

"But seriously... you guys – it has to be new. I don't know how many people said, 'What's new for this year?' Not that they have what was new for the last year. Right? It's not what's new in the last five years, or what's turned out to be a really good plant in the last five years that I should really have. Because when things are new, none of us knows exactly what they're gonna do – even if you hybridized it. So I think that's what's got to change which means you have to be more critical about what you buy. It means we live in an age now where you don't study the plants as much. It's all impulse buying because it's all out in front of you all the time. It's too easy. You go to vending and there they are. If you had the money, and went to the cash machine and you got your twenties out and these are the twenties you're gonna spend. There they are and here's the money and... you know? It IS like kids in a candy store."

"So what do we do? Do we become a group that however we do it networks more, talks more about the plants, the qualities of the plants. 'This is a really good plant.' I don't hear a lot of that. At your local club meetings, that's a perfect time to do it. Sit around and talk about what's a great new plant that somebody got that they're really

excited about. And then what's a crappy plant. We're good at talking about which plant's are crappy. Right? We're not good at saying, 'This is a great hosta! I got it and I'm so happy I have it. Everybody should get it. This is who I got it from.' I think that's what local clubs can offer that the internet can't. I think that's where we need to go."

"I think what we don't want is to become like the daylily society and have people 'up here' that buy brand new \$200 daylilies and are very elitist in the way they do it, and then the general public gets the stuff that's 30 years old. If I produce a nice new hosta like H. 'Curly Fries', I want everybody in the country to have it NOW. I don't want them to have to wait 30 years to get it. We have tissue culture, we can do this. We want to market those things out there. That's what makes us special in hostas. We need to keep everything together, and that's hard. It's really hard to do that."

"I don't know where everything's gonna go. Like I said, we're kind of at a point now where we're overwhelmed with sports. In the next five years, you will see the wide-edged form of everything you can imagine. Everything isn't fit to tissue culture. You'll see three or four sports of H. 'Orange Marmalade' that have been or will be introduced in the next few years. And I won't introduce any of them. Anytime anybody gets a plant that's a little different sport, they're not just keeping it, chopping it up, passing it around – it's mass-marketed. And you can stop that. That's one thing you can stop real fast. Just don't buy them."

"I think that's where we're gonna go. I think the plants are gonna get better and better and better. We've got so many people hybridizing, I think we're so close to some really cool stuff comin' out from a lot of people. Especially as we get these new plants out that just makes it easier for the next batch to come out. I think we're gonna get some really new things. I think we need to be very selective about what's introduced. I think you guys need to talk more about it. We all need to be smarter on both ends about what we do. I'm not saying the nurseries don't put out a lot of junk because they do. There's a lot of junk and I don't buy it. That's my job as a nurseryman – crappy

plants don't fly.

"What do you think? How can we do this? It's a hard question. How many of you are in a hosta club? Everybody. I'm preachin' to the choir here. How many of you have a hosta club that's growing? How many have one that's shrinking? What do you do to get yours to grow?"

"We're going to the local greenhouse/retailers and setting up as a club when they have their open house and talk about hostas and recruit.."

"I think that's a very good thing to do. What we used to do in the old days - we used to have leaf shows in malls. They weren't judged or anything. They were just demonstration things back when nobody knew what a hosta was and our mission was to teach people what hostas were."

"Then they threw us out of the mall because of the liability."

"Thrown out of the mall or they wanted to charge us a fortune to come in. Our mission then was to teach people what hostas were. People know what hostas are now, and I think we don't have a mission. The questions they ask are, 'How many hostas are there?' That's what they ask now or they ask, 'Is there a deer-proof hosta?' Seriously. A lot of people tell us that. Those are the kind of things we have to do, and that's not nearly as appealing as it when you talk about pest problems? Stop talking about pest problems. They'll learn about them soon enough."

"HVX virus. I don't want to hear anymore about it. We've got tests for it. We spend thousands of dollars a year to make sure your plants are clean. We've even got the Dutch sort of under control. They'll never be totally under control just because their rules are different than our rules. And actually the USDA rules are different than our rules. We're 100% people - this society is 100%. We're that kind of people. We want our hostas to be perfect. We want our hostas perfect year round. Right? That's what we want. The USDA says 95% is good enough. But we all know that 95% foliar nematode free isn't going to get us very

far - is it? Not for very long. And 95% virus free probably won't get us very far.

"Talk about how great hostas are - how popular they are - give them a list of ones to try. Talk about the plant. I know we all think we're a people society, but everybody else thinks we're a hosta society. We need to think about that. Push the plant. It's the greatest plant in the world! Believe me. I've spent my whole life doing this. Seven days a week. If it can captivate me for seven days a week, that's quite a thing because my mind runs all the time. It's a wonderful plant. It makes people really happy. That's why I do it."

"Because it looks the same all year."

"It looks the same all year. I'm amazed. There's something about this plant - when people grow it, they become better people. They become nicer, they become gentler, they're more into community. It's a wonderful plant - it really is! So we need to spread that. I think the future is very bright about the plant. I'm worried about the people."

"If we don't talk about it..but it does exist, and I'm afraid that if everybody puts their head in the sand, and yet they are real issues that we need to be aware of. I've raised this question before. When a foliar nematode appears in a plant that I get, I'm not very happy."

"So what do you do?"

"I go back and let the grower know."

"First thing you do is call up the grower and say, 'What the heck is goin' on here?' Start there - start working it out."

"But if somebody is not aware of it, it goes on."

"When you get a new member and they get interested, you go visit them and if you see a problem, explain it there. What we've done like at the National Convention... who do we have speak? The keynote speaker is about the virus. And we need to spend \$25,000 more to figure it out and

that's fine. If that's how they want to spend their money, that's fine. When are gonna hear somebody get up and talk about the 100 best hostas? Or plants we should have? We don't do that. And if you were new, and you just walked in off the street in Minnesota and sat at the National Convention and that's what you heard – would you come back? There's a place for all of that and like I said, they'll get to it soon enough."

"What's that brown streak in the leaf?"

"They'll ask you – don't you worry – they'll ask. And then you tell them, and you've got to go look and see how bad it is, and if it's not so bad, then they can jerk all of that stuff out and probably get it under control. If it's everywhere, then you say, 'OK - here's the deal - you just live with it, but don't pass it on. And don't bring it to club auctions.' With foliar nematodes that's just part of the deal."

"..what's the difference?"

"We want our plants to be clean. That's what the leaf show is all about. They are supposed to be perfect. No holes - no nothing. Perfect."

"Let's cheer it up a little bit - let's go somewhere different. H. 'Curly Fries'. What is your mindset? How do you plan for a H. 'Curly Fries'? What were you looking for? What were you trying to get? How did you go about getting it?"

"In that case – sometimes you're really smart in hybridizing figuring things out and some seedlings are just gifts from God. You know? What I saw was there was a seedpod on H. 'Pineapple Upsidedown Cake' which is very unusual because it hardly ever sets seed, and I was just smart enough to grow the seed. I got one little seedling out of it. A little weak thing - almost died. We nursed it along and before you know it, I had that. Now once you have a plant like H. 'Curly Fries', the first thing you do is give it a cute name. Don't waste a crappy name on a great plant. You can kill a plant naming it after your grandmother. You wouldn't want to name your best plant after your

grandmother – would you? Don't do it. And even if it's Mildred Seaver... do you know how many people really know Mildred Seaver? Not many – not enough to sell the plant. Don't do that. Give it a cute name and then market the plant.

"I think one of the things most growers don't do is market their plants. Yea – you have a website, you have a catalog, you have a list - but you don't market the plants. Someone else does the marketing. One of the reasons that my plants sell and they're in people's gardens everywhere is that I work very hard to market them. I started two years before we had a name on the plant, and I started entering it in these shows. You bring a pot of that thing and you set it down on the table, and it draws a crowd. And they can touch it, and people were excited.

"So I had to come up with a name pretty quick. One day I was walking across the nursery and I thought of the name, and then I tried it out on a bunch of people first. Then you've got a plant, you've got a name, and you've got to market it, but you've got a marketing window. The silly plant's won some awards and people want it yesterday. Ideally you bring the plant, it's not registered, it doesn't have a name, it wins the seedling contest - they go back to your vending booth and... 'Oh, by the way, I just happened to name this plant and I have 500 of them.' And everyone takes one home. Right? It doesn't work quite like that.

"So I had to hurry the plant into production because my window was closing. So we had to ramp it up in TC, and I had to force it along and I had to get it out. Last year was just hellacious trying to grow the things, push it along because it had to come out last year. It couldn't wait another year. So all that goes into it.

"I think the biggest problem with hostas is the people who introduce most of the plants are TC labs. TC labs market, but they don't market to you – they market to nurseries. So the people that are pushing them are the nursery people. You're not the first in line pushing, but you're the ultimate pushers.

"I think that the other problem with the marketing is that there's not enough of us. The elite hosta collector market is too small for every hybridizer to introduce a plant a year. Wouldn't you say? You know more hybridizers than I do. I mean there might be a 100 people who are fairly serious so there's a hundred plants right there that would be introduced every year which is too many for our group size. We don't have enough people.

"The daylily people get away with it because they introduce it themselves like I do. I introduce my own plants. So I don't have any kind of pressure on me - I can do whatever I want. I just do it. Other hybridizers have to find other people to introduce for them, and then that gets complicated. They have their own business model that they want to do and they select certain plants based on what their people tell them they want, and maybe your best plant you can't get introduced. Right? So the system doesn't work quite right, but if you market it right, then some plants of yours that you've gone out and pushed pretty hard and have gotten them marketed... Which is what I do - even if I produce them, I have to market them and get them in the trade. If we all did that, we'd all make better choices.

"How many catalogs do you see where there's a name and just a little short description? White-edged, medium, lavender flowers. Right? How many of those are there? Every year I write these big, long lists and every time I write these long descriptions... It's just ridiculous, but I want you to know who the hybridizer was. I want you to know what year it was registered..because that way you know whether it's new or not. You know if it's from 1984. You may not care. It's hard to describe hostas - you can only say white-edged, medium-sized hosta in so many different ways. I remember Zilis telling me about the book and it was driving him nuts. 7400 hostas, and he's trying to describe green hostas differently. He was running out of adjectives so we were trying to give him new adjectives. That's crazy. That's sort of how the marketing (works).

"As far as hybridizing, sometimes you do get lucky in making crosses. Like the Longianas - it was something I set out to do. Eric Smith did it with H. 'Tardiflora' and H. sieboldiana, and I wanted to do it with H. 'One Man's Treasure' and create bigger plants. Eric Smith wanted them smaller. I wanted them bigger. I wanted them just as blue. I wanted more substance... I didn't want..that 'stiff upper lip' kind of thing. I wanted more flowing plants. That's what I was aiming to do. It wasn't a very simple thing, but it was intentional and from 800 seedlings we have four. And that's all we will name from that generation...

"And that's a really hard sell. To me, that's a really neat thing what Eric Smith did. When Eric Smith did it - it was a huge thing wasn't it? It just goes to show you that (when) the first person does it is big. If you do it the second time, nobody cares. It's been done. Right? So that hasn't caught on very well. And I don't know if it's because you don't understand or you just don't care because it's been done. You've already got H. 'Halcyon', you've got H. 'June', you've got all those other plants. Who cares?"

"I saw a picture of H. 'Curly Fries' in a garden magazine. Did you provide them with the picture?"

"No, I did not supply them with the picture. The person that wrote the article saw the plant at Klehm's Song Sparrow Nursery and talked to them about it, and I guess she selected a few of their plants. They are networked in some way to the "Garden Gate" magazine which doesn't have any advertising in it. A lot of people have seen it, and I guess it's caused quite a commotion with the thing. The phone's been ringing off the hook. And so the picture they had was my picture so she couldn't just use the picture without contacting me. So she contacted me and asked to use the picture, and we went around. I wanted my name and my website. I said I want to be listed as a source. Well because she had this relationship with Song Sparrow, she didn't want me as a source. She found a plant there so that was fine.

"It says in the article, 'The originator with my name' – it does have my name, but I mean... who in America knows Bob Solberg other than the people in this room? That magazine goes all over Iowa, it goes all over Illinois, it goes to Wisconsin - it's a 'big list' publication let me tell you. And Klehm called - they were out of plants. All my other customers – we have lots of customers out there... 'Can we get more this year?' The phone's been ringing off the hook so that's been good for us. So that's sort of how it went. That's what we do – we sell to other nurseries. So what I need to do next time is get up with them first now that I know this works. And get the next one – H. 'Blueberry Waffles' – because that's the next one that's going to cause hysteria. It already has. People are bugging me all the time about that plant."

"Is that the one that was in the garden in Michigan?"

"It'll be out this fall - there may be some at the National. It'll certainly be here next spring. That's the one people are dying for... Sandy Brown will be very excited. That's the way it works. If you do it right, everybody is happy."

"If you've got an interesting looking sport, who do you contact?"

"You've got a sport, and you don't know what to do with it. There (are) several ways to... You can certainly send a picture to me, and I'll give you an opinion. The first thing I'll tell you is how many similar ones there are if there are, and I'll even tell you if I think the thing's marketable."

"Somebody sent me H. 'Rhino Hide' – do you know that plant? Don Rawson sent me a picture of that. It's a tetraploid H. 'Tokudama Flavocircinalis' or something. It's a very thick plant. It's also a very slow plant. I didn't want it, and I told him I didn't want it because it grows really slow. I wanted a plant that grows fast. Walters didn't care about that, and they're selling the plant just fine. Different nurseries have different things that they do. So you need to shop the thing around and get

other people's opinions. And some people will be interested and some people will not.

"If it's a really good plant, then you need to figure out a way to get compensated for it, and everybody has a different way of doing it. Sandy Brown with H. 'Blueberry Waffles' contacted several people and because I really wanted it... I wanted (an) exclusive... H. 'Blueberry Waffles' is a wonderful plant, but Walter's wasn't interested because it's blue and they're into sports. They were interested in H. 'Rhino Hide' that I wasn't. They didn't want the seedling which I'm more interested in, because that's what we do. So you need to shop the thing around."

"If it's really, really, really good you need to patent it, and then you need to dig your heels in, and don't let anybody bully you about the royalties because it's your patent, and your plant, and if they want it they've got to come to you. And you've got to be tough and police the patent. It's a lot of work. You can have people do it for you, but then you lose some money and you lose some control. All those things. I can help anybody with that, and I'll be honest and tell you the best person to handle it."

"It's a very exciting thing when you get a plant that's very good. And unfortunately I've seen people... H. 'Blue Mouse Ears' – OK. The Deckerts should have patented that plant, and they would have made a fortune. I mean they've made tens of thousands of dollars on all those plants that have sold. At a buck a plant, do you think there'd be a million produced at some point? At a buck a plant... at 25¢ a plant, we're talking a lot of money here. Right? For whatever reason, they didn't do it. They missed the boat. So if you have something, before you do anything, talk to some people. And that's the good thing about us, not a lot of people will talk to you."

"Do you have one?"

"How many years before you know that it's stable?"

"A sport I can tell you in about 20 minutes. A seedling's a whole different game. But a sport –

because I know the parent and I know what kind of sport it is – what's changed, what's mutated – and we know how those mutations work. And I can tell you even if it's not stable. I can make it stable. Seriously. Throw it into (tissue) culture and we'll fix it. If you want the variegation in the center, we'll do that. If you want it on the edge, we can put it there. If you want it streaked, we'll do that for you. We'll get you three plants out of the one plant - if it's really good. Sports are a race. If you've got it, somebody else does. That's what you've got to think. It doesn't mean you get reckless. You just have to know that you need to act on it. Don't wait five years because there'll be three more just like it named. Because those people in Holland are namin' them like crazy... What's it's sport of?"

"It's either H. 'Revolution' or H. 'Independence'."

"It has to be REALLY, really different because that thing sports all over the place. It's got different ploidy and everything."

"Were you joking or were you serious when you said you can change things in tissue culture?"

"Dead serious. Mark Zilis will buy a streaked plant and he will offer the streaked plant, he'll offer the bordered plant, he'll offer the centered plant, and he'll offer the green plant. You can get that many plants out of one streaked seedling. He's done that with some of the seedlings he got from Doug Beilstein. I'm dead serious."

"We can take the plant – if it won't settle out, we can take that (and) we can get it to settle out. Instead of dealing with a sole plant that divides very slowly in the garden, we're dealing with little plants 'this big' that we can multiply and divide every four to six weeks. So we can take those changes and we can push them. We can get one that's sporting in the center, and we can start pushing it in that direction until you've got a good one. Once you've got a good one, then you just multiply that. That's the beauty of tissue culture. That's why we have all of these sports. They're not throwing this stuff away. Any little plant they see

get a white streak in it, they start working on it..they start trying to turn it into something. That's what they do for a living which is good, because it'd take it forever to do it in the garden. We lose a lot of sports that way. This way you don't lose them, but you also introduce a bunch of crap. That's the problem. If you put this much into trying to develop something, you've got to get your money back. It may be just like the last one."

"Do you ever see any work being done to make a hosta that deer don't like or voles don't like? Is anybody working with that stuff?"

"I don't know that anybody is. I would imagine that there's some genetic engineering process that would help. It shouldn't be really hard to do, it's just expensive. You know they've taken the gene out of glow worm that makes it glow and put it in a tobacco plant so the tobacco plant glows. That's what basically we're looking to do. We're looking at going in and taking the genes that make daffodils inedible to everything - finding those genes, isolating them, and transferring them into hostas so the hostas can make that chemical without screwing up the plant too bad, and then being able to pass those genes along through hybridization. So I think it is doable, but I don't know that anyone is interested in it. I've always thought it would cost a lot of money, and again – we're a very small group. It's hard to justify the cost."

"I fear that if we do that, and those are the only hostas that we buy that are patented and trademarked, and they're marketed by people who aren't hosta people, and they're in all the box stores... You can see the road where that goes. At which point, we are the elitist group. If one of us did it, then you'd have to patent it and trademark it. You'd have to. I don't know if it'd be a good thing. Just like red in hosta leaves. I don't know if it's a good thing."

"How does a plant patent work? 17 years at which time... You say some plants are protected - because so many plants look alike. Somebody

says, 'I've already got that plant.' I suppose there's DNA testing?"

"You could do that I guess. A patent is for 20 years now, and it's only good in the U.S. So they can go over to Holland and propagate it all they want. What it controls is the propagation of a plant. No one can propagate it without being licensed. So what you end up doing for example with labs in other parts of the world that took H. 'Orange Marmalade' and put it into culture... They can sell those plants in Europe and China, but they cannot import them into this country. Now some people are not as honest as others, and they try to do that. My job is to make sure they don't so when I find that happening, I get on the phone and I do what I have to do. I've not had to use a lawyer yet, but I'm sure some of these people have lawyers on staff.

"The problem is the plant world is pretty small. Everybody knows everybody. They don't want to go too far over the edge because they have plants of their own, and you don't want to get in this war over everybody's patents. They've got patents, we've got patents so it's like a deuce. If we had patents and they didn't, then it'd be a different deal. It is expensive. In my case, time is expensive more than anything. If you're gonna make a dollar a plant and there's a million of them, that's a lot of money in the pot. I will not make a million dollars off that plant. I do make good money on it. Somewhere between 25¢ to 40¢ per plant depending on what size it is. I have different contracts with all kinds of people all over the world."

"That's not very much for a plant that's selling for \$20 to \$30 is it?"

"No, but that's..what they can afford to pay. Actually that's more than they want to pay, but I have the patent and they don't. They want to pay 15¢ a plant because they have to push that plant into a certain price point for their customers. Their customers want that plant at a certain price, and they want it at a lower price the next year. You know how that works? If you're stuck on that royalty, then they can't do that so much. If you sell plants to somebody for 25¢ a plant and you

have a 25¢ royalty on top of that there's not much wiggle room is there? That gets to be a big percentage of the cost. We're not selling \$10 plants. Walters would sell liners for \$1.99. 40¢ on \$1.99 is a pretty big percentage.

"Now if it's not patented, that's different. I can pay royalties on a plant that's not patented too. Usually for a period of time – two years generally – a lab can take two years to produce a plant. Another lab can take two years to sort of catch up. If I have plants in all the different labs that compete with each other, then none of them really want to piss me off. So I get more than the two to three years out of it. So I do a balancing act. Again – the whole idea is to make everybody happy. It works for everybody. They get exclusive plants, and they don't fight over them. And if it's a plant like H. 'Curly Fries', then it's five years or whatever down the line because it's a huge plant. And everybody said they're going to be pouring in from overseas, but in five years nobody may even want it. That's the thing – you never know. That's fine. It's business out in the big ocean with the sharks, and it's fun for a while."

"At Winter Scientific Meeting you said the more red that you got into plants, the less you were interested. Would you want to expound on that a little bit?"

"If you were there, I showed a slide of a plant that showed up last year where the leaf started with red on the edge. And it wasn't just a vein like it is on H. 'Beet Salad'..there was some red on the edge all the way around. And we see that a lot in the spring and then it goes away in two or three weeks, but this didn't go away. In fact, it started at the tip and started spreading down the leaf until half the leaf was red. It was sort of like a blush, and it was a purple-red color. I'd introduced into this plant the red pigment. H. 'Strawberry Banana Smoothie', H. 'Whiskey Sour' – purple H. longipes that I doubled the pigment in there.

"So it's kind of a blood-red color... In this case, it's not in the veins - it's on the surface of the leaf. Not on the back, but it's a blush of red if you can imagine that. But it's kind of a muddy color isn't

it? And I don't know (if) it's attractive. It'll come up in two or three weeks now, and we'll see what it looks like this year. The first year it came up, it was a little seedling, and I knew it had a little red edge on it. Last year it started doing this blush thing. The blush lasted until the middle of June so the exciting thing is that the red is staying or at least it did last year until it was 104. Then it was gone. But still, it stayed 'til the middle of June – that's pretty good. Better than two weeks so it's encouraging that the plant will do that. But I don't like the way the plant looks. It's not a pretty plant. And so here you spend years and years and years trying to create this thing and you get it, and I don't know if it's marketable. I mean it is obviously, it is at some level - we could sell 500. It's a decent plant - but it's not something that I'd want to patent necessarily."

"What would you cross that with? Cross it with the one with purple veins?"

"It's very simple – one cross. Right? You've got it between the veins and on the leaf. This year we'll do it! We'll get a picture of it and see if you like it. I'm amazed at how far I've gotten at this point just by sort of making smart crosses, but I don't know that it's a pretty plant. The one with purple in the veins is a pretty plant, and it lasts – maybe not 'til the middle of June but it holds on pretty good. Especially up north – it holds on a lot better. I just need one more year. That's a plant that maybe I'll patent just because there isn't anything else like it. It's sort of a H. 'Tattoo'-kind-of-plant. I'd market it sort of like H. 'Tattoo', and Tony's (Tony Avent) done a pretty good job with that. And this one grows. Now if you only sell 20% of what he has, you'd... (Several commented that they've killed H. 'Tattoo' several times.) He's not so dumb..."

"Would you ever keep a plant off the market because of your personal feeling for it."

"Yes. I have. Let me tell you a funny story. I had a plant that was sort of a funky yellow color - a not very pretty chartreuse color - and the leaves would come out and they'd roll. For a long time,

they were rolled and they looked kind of weird. A lot of people would look at it, "WOW! That's really cool." Well I didn't like it. It was very thin substance – it was a cross of two plants that were very tough, and I guess if you take all the substance out of two plants, and it had that 'toughness gene', the leaves would roll right up.

"When convention time came around, I picked that thing up and put it on the truck and was gonna get rid of the thing. I thought we'll take it to the auction, and we'll auction it off. Right? It'll be fine. We'll tell jokes about it. So I got up there and started auctioning it off, and there was some people bidding on it, and I started making up funny names like H. 'Roll Your Own'. We were havin' a good time! And this guy goes up another \$50 and before you know we're up to \$800. And it went over to Europe. And it was the plant that year that went for the most money at the auction."

"Danny?" (Belgian hosta collector and hybridizer, Danny Van Eechaute.)

"Yea. Danny. And so some day that plant is going to come out of tissue culture with my name on it. It may be patented. It's gonna be everywhere. You people are gonna flock to it. You're gonna buy it like crazy. And I'm gonna cringe every time I see it just like I do when I see H. 'Praying Hands'. Because I hate H. 'Praying Hands', and I'm not gonna sell it. Because yea - I'm like that."

"Didn't you sit on H. 'Five O'Clock Somewhere' for a while?"

"I sat on H. 'Five O'Clock Somewhere' until people put a gun to my head and said I had to do something with it. And I was right - it is an interesting plant and everything, but it's a hard plant to grow. And that's why..it's slow. But it's a neat looking plant. I like it, but that's the way it goes."

"Do you have a favorite?"

"Everybody asks me, 'Do you have a favorite?'

You know I live in the future. The plants I really like don't have names and that's a really dumb answer. It's not a very satisfying answer so I decided that I need to have a favorite hosta. So I do. My favorite hosta right now is H. 'Smiley Face', and it's on the front page of the "Gossip" if you have that. It's a wonderful little plant that's got round yellow leaves, and it's a really neat kind of 'smiley face' color. It's got pink – red-pink that comes up into the petiole. It has nice pink scapes, really dark purple flowers. It's a neat, tight, very heavy substance little plant. It grows in the shade and stays nice and yellow. It's a neat little plant. I really like it a lot. Now in three weeks when all the seedlings come up, I will have a different favorite. And it may or may not have a name. But right now that's my favorite hosta, and that's what I have on my Twitter account favorite, but someday I will change that. But I'm very proud of that plant. I worked hard to get those plants. They didn't just fall in my lap."

"When you move are you going to have a bigger nursery?"

"The nursery will be about the same size. It might have more plants in it because we'll be changing pot sizes. We won't have the retail areas where we have the big pots anymore. We'll be more mail-order and more wholesale-oriented. We have enough room for up to 20,000 hostas a year now. I'd like to get that up to 30,000 at some point. I don't know if that's going to work for a lot of the reasons we just talked about – the reasons I'm concerned about all of that. But if we get to 25,000 – if we go to smaller pots, I can get a lot more plants in a hoop house. So it won't be bigger, it'll just be closer to home. I can walk to work. And that'll be really nice with gas prices rising. But if gas gets to \$5 per gallon, we'll be in real trouble won't we? If you think this recession was bad - remember it was when gas went to \$4 per gallon, that kicked this one off."

"Will we be able to get gas?"

"You'll be able to get it. There'll be plenty of it. Everything will just cost more. Go from \$2.50 to \$5

– double. That affects everything we do. And do you think I can raise my price? No - because you guys aren't gonna pay more. It's gonna squeeze a lot of people and really the nursery industry is just hanging on right now."

General group comments about businesses like Monrovia and Wayside changing the way they do business to try to stay in business.

"There are a lot of suppliers to the 'box stores' that have gone out in the last couple of years because they weren't making any money either. The tissue culture labs are in business, but they're not really making a whole lot of money. They've dropped their prices considerably when you look at the catalogs. Demand is just not there. I brought 20 H. 'Curly Fries'. Somebody came up and asked why they weren't flying off the table. I said they're \$30. There are a lot of people who would not pay \$30 for a hosta. And I understand that. Back in the 1990's, they'd have been \$100. I introduced H. 'Korean Snow' at \$100, and I think I sold 100 of them."

"In 1997, H. 'Night before Christmas' was \$80."

"Those days are gone. We generally shoot for \$35 for an introductory price. Some things are a little more. H. 'Curly Fries' I think was \$40 last year (or) \$45 – somewhere in there. I try to stay under \$50. \$50 scares everybody because you know that there's lots of plants. You know that if you don't get it this year, they'll be less next year. You all know all this stuff. I don't mean to be pessimistic about it, but..."

Hosta College speaker, Bob Solberg, answering one more question after the conclusion of his final class of the day, "Ask Bob".

