NEWSLETTER



Editor's Note: The newsletter is distributed electronically (blind copied so addresses remain private) to all members for whom we have an email address. If you do not receive an emailed newsletter please notify me at thues@sasktel.net.

Upcoming Meeting Dates on Zoom:

Sat, Apr 24, 2021 @ 1:30pm

Guest speaker Dave Sorokowsky, Paph Paradise "General Paph Culture"

Sun, May 30, 2021 @ 3:00pm

Guest speaker Francisco Miranda, Miranda Orchids

"Brazilian Orchid Habitats - 3 (the Coast)"

SOS Executive

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Speakers: Heather Anderson

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www.facebook.com/saskorchidsociety?

Mail Address: SOS, Box 411, Saskatoon, SK S7K 3L3

The March general meeting will be held on **Saturday, Mar 27 via Zoom beginning at 1:30pm**. Please see page 2 of this newsletter for a link to the Zoom meeting.

Our guest speaker will be Marni Turkel, presenting: "Less Is More - Small Orchids."

ANNOUNCEMENTS

GENERAL MEETING AGENDA:

Join Zoom meeting - family members are requested to join on a single device to help us stay under the maximum number of devices for our zoom subscription

1:30 pm Presentation - Marni Turkel

We are sharing our zoom meeting link with members of the Orchid Society of Alberta (OSA), and the Manitoba Orchid Society (MOS), for Marni's presentation.

Approximately 3:00 pm - SOS Business Items

(Following Marni's presentation)

Introductions to SOS Executive Welcome to new SOS members Questions about plant orders Problem corner General feedback

PLANT ORDERS

Ching Hua Orchids

Order deadline March 22, 2021.

Plants are expected to arrive May or early June.

Plants will arrive bare-root, wrapped in sphagnum moss so will need to be potted as soon as possible upon pickup.

Prices are in Canadian dollars, with 10% charge added for brokerage fees. Costs of shipping by Air Canada from Vancouver to Saskatoon will be divided equally amongst all orders. No payment will be required until Heather receives an invoice.

Plant list is available here.

Submit orders to Heather at heather.jane.anderson@gmail.com or use this form

https://docs.google.com/forms/d/e/ 1FAIpQLSd9_v5kV09Xlk6McI7_Jbr6xZ3TlG8XR vt4AIEuCAHhzJfLzQ/viewform?usp=sf_link

You are invited to join the SOS General Meeting at 1:30 pm SK time, Saturday, March 27, 2021 by clicking on this link:

Join Zoom Meeting

https://zoom.us/j/93122975156?pwd=ZkVLSkszMEpmc3U5aVQwaDZXditpdz09

Meeting ID: 931 2297 5156

Passcode: 599555

The meeting will begin promptly at 1:30pm.

PLANT ORDERS

Garden Slippers Shawn Hillis

Order Deadline March 30, 2021, delivery in early to mid April.

Garden Slippers, in Calgary, AB, specializes in Cypripedium orchids. These are hardy perennial orchids known as Lady's Slippers.

FROSCH SPECIAL OFFER: 3-for-1 Pricing

3, single-rhizome plants for \$60.00 CAD (excluding GST and shipping).

Plants are 1-2 years from flowering, selected at random from a possible 15 different crosses.

Individual, more mature rhizomes are available from the catalogue. The average prices for mature rhizomes range from \$60-75, so the price of the young plants is very attractive.

The website price list is current.

The rhizomes will need to be transplanted right away; once they are taken from the garden some will begin to come out of dormancy. They will be hardened off and ready to transplant. The planting site should be selected before receiving the plants.

gardenslippers.com and Frosch's website cypripedium.de have recommendations & instructions on where and how to plant, and much more culture information. The price list circulated to the SOS membership includes GST and shipping, and has some recommendations by Shawn Hillis.

Orchids In Our Tropics

Terry Kennedy has updated their plant list and a second order is being accepted. The first order exceeded \$1000 so we will receive a 20% discount on both orders.

The deadline for this second order is **March 22**, **2021**. Both orders will be shipped mid April and arrive potted. Prices are in Canadian dollars; GST and shipping costs will be divided among those ordering.

The plant listing is here.

Email your order to Heather Anderson at heather.jane.anderson@gmail.com or fill out and submit this form to Heather and David.

ECUAGENERA

Orders have been submitted.

The orchids will be shipped to Edmonton from Ecuador Apr 15-16, and OSPF volunteers will sort and repack our plants. A big thank you to Dave Nixon who will drive the plants to Lloydminster and hand them off to Tom Kondra, who will bring them to Saskatoon. Thank you Tom. Heather will contact people to arrange for payment & pickup from her house around April 18-19.

Paph Paradise & Gold Country Orchids

Orders have been submitted - delivery late May pending US Fish & Wildlife Dept processing the CITES documentation.

Heather will receive the invoice prior to plants arriving. Those of us who have placed orders will be charged the cost of the plants in USD + 15% for documentation & shipping. Heather will contact us for payment in cash, cheque or e-transfer.

Orchids will be shipped to Calgary and FOS member Ross Otto will ship our orchids to Saskatoon. The Calgary-Saskatoon shipping will be divided between plant orders and Heather will collect this at the time of plant pickup.

SPEAKERS PROGRAM

Marni Turkel (pronounced tur KELL) is a native of the San Francisco Bay Area and has been growing orchids since 1980. She grows in four greenhouses in Santa Rosa, California with approximately 1250 sq ft of growing space. Her main interest is in miniature species but plenty of larger plants have crept into the collection as well. Marni has been a contributor to Orchids Magazine with her series called "Well Worth the Space" and "Give It A Rest". Her articles have been translated into Dutch, German, Portuguese and Swedish for international publication. Photographs of her plants have been featured in articles in noted orchid publications including Orchids Magazine, Orchid Digest, Richardiana, The Orchid Review, and The Australian Orchid Review. For the last few years she has been sharing her photographs and knowledge on

OrchidsForum.com and on Facebook.

After working for over 43 years as a potter, Marni has retired from ceramics to pursue orchids full time. Starting in 2009, she expanded her work with orchids to include propagation of orchids from seed and has set up a flasking lab of her own to take the process from start to finish and sell flasks of many of the orchid species in her collection. A link to Marni's flasking website is **here**.



Dendrobium dicheoides Photo provided by Marni Turkell

"Less is More: Small Orchids"

A look at the joys, benefits, possibilities and challenges of miniature orchids. The talk covers some of the basics such as "what makes an orchid an orchid", growing spaces both indoors and out, a review of cultural needs of orchids in general and small orchids in particular. It also includes a gallery of wonderful species that are space saving and extremely rewarding. An excellent talk for beginning as well as experienced growers.

REQUEST FOR TREASURER

Please consider putting your name forward for the Treasurer position (or for Secretary, in which case Donna Carlson-O'Keefe will switch to Treasurer).

LIBRARY

If anyone is interested in borrowing any library resources, please email Librarian Deb Huculiak hucuh@sasktel.net to arrange for pickup. Please include in your email message your name and a phone number for Deb to reach you. You can find a .pdf of the library holdings on our website. Available are books, magazines (AOS Orchids and Orchid Digest), pH meter, light meter.

FEBRUARY 2021 GENERAL MEETING

MINUTES recorded by Donna Carlson-O'Keefe

The February Zoom meeting was moderated by the Saskatchewan Orchid Society, and shared with Orchid Society of Alberta and Manitoba Orchid Society. The meeting was chaired by Tracey Thue, SOS President. There were 87 participants from the three societies.

Presentation

Glen Decker: My Life with Orchids

Glen said that he enjoyed his visit to Canada the last time he was here. He sold his business, Piping Rock Orchids, in the summer of 2019 and, with all the Covid turmoil, he is thankful that he did. He has been growing orchids for almost 45 years and when he looks back on those years, he sees that all the places he has been, all the people he has met, all the friends he has made, have all been due to orchids. His presentation will be a little bit of travel, a little bit of history, a little bit of culture. He wonders if these meetings should actually be called Orchids Anonymous meetings.

For Glen, and probably for most people, it started off as a hobby that went totally out of control. He showed a slide of his "hobby" greenhouse, which encompassed 1200 sq. ft. of space with more than 5000 plants. When he first started out, he grew *Phalaenopsis* and *Cattleya*, but then fell in love with started orchids later. Glen showed a slide of another orchid grower in New York - Bob Wells, President of the New York Stock Exchange. At one time, he had 4500 orchids in his apartment in New York City. When he retired, Bob moved to California and expanded his collection to 15,000 plants, as a hobby!

Glen showed slides of some of his first mentors. One was Dave Off of Waldor Orchids in New Jersey. George Off, the founder of Waldor Orchids, was originally a *Cattleya* and *Cymbidium* grower, growing for the cut flower market. Then, in the early 70s, they transitioned into selling potted plants to hobbyists. Waldor Orchids is one of the oldest orchid nurseries still in business in the USA, perhaps in the world. It is now into the fifth generation. The original greenhouses are still there.

George Off might have been the first person to develop the practice of growing orchids in a bark mix. Until the early 60s, growers tried to duplicate the orchids' natural growing environment, using media such as osmunda tree fern fibre (for *Cattleyas*), peat moss, leaf mould, sand, etc. George came up with what was referred to as Off Mix, which was a mixture of fir bark, German peat, Palco Wool, Perlite, bone meal, marl, rock phosphate, and Poordens 38. Many orchid growers use fir bark mixtures now, tweaked for their own requirements.

Another of Glen's mentors was Norito Hasagawa, who owned Paphanatics along with Harold Koopowitz. They are responsible for nearly all the *Paphiopedilum maudiae* hybrids, especially the vine-coloured *maudiaes*, some *parvisepalum* hybrids, and much of the re-introduced *sanderianum* hybrids. Norito was Glen's mentor on the west coast, opening up places and people for him to see and meet on the west coast where most of the slipper growers were located.

Radcliff's Orchids in Winchester, UK, now owned by Paul and Mary Phillips and started by Mary's family, were instrumental in a lot of the major complex breeding before the Second World War. During the war, a lot of the plants were shipped over to America to escape the bombing. This gave the west coast growers the stud plants they needed to continue the breeding of these complexes.

Glen travelled to Winchester to give a talk to the British Paph Guild and, while there, he took in the local attractions like Radcliff's Orchids, Winchester Cathedral, and Stonehenge - which he probably would never have seen if it weren't for orchids. And if it weren't for orchids, he probably would not have see much of Canada outside of Montreal and Toronto.

Glen also visited The Eric Young Orchid Foundation on the Isle of Jersey, Channel Islands. Eric Young was another obsessed orchid grower who was breeding *Paphiopedilum*, *Phrapmipedium*, and *Miltonia*. It is open to tourists if you want to visit. Many people are familiar with *Phragmipedium* Eric Young and *Phrag*. Don Wimber. Don Wimber was another person who worked with Eric Young in hybridization and breeding. When Glen used to go over there, he found them to be very hospitable, giving him keys to the flat and greenhouse. He could wander around the greenhouses at will. Not too many greenhouse owners would allow you to do that these days. Now, the original greenhouses have been torn down and there are new greenhouses and a visitor centre. Most visitors are not allowed to go "in the back" to observe how the orchids are really grown.

Glen is amazed at how differently everyone grows orchids and that is why he finds it so hard when he is lecturing on culture, so all he can tell you is how he grows them. A lot of plants are very adaptable: if the plants are happy, that is all that matters.

In his talk, Glen moved on to continental Europe. Holland is known for plants in general, and orchids as well. He found Amsterdam to be a wonderful city, famous for its red-light district, but also for its floating flower market: greenhouses on barges in the canals. He had a friend who had a commercial greenhouse just outside Amsterdam, to which he would go once or twice a year, usually bringing back 2000 plants each time. In their community trays they would use shredded cushion foam in the mix. It gets wet quickly but also dries out quickly, so you get good air flow around the roots.

Holland has meticulous growers. Everything is perfect, very clean, very efficient. Efficiency is important because the premise of a lot of the nurseries in Holland is to produce flowers that go to the world flower market. Floricultura is a huge orchid conglomerate that has growers around the world in India, Brazil, and California, as well as Holland. Glen toured a nursery that did not sell anything that was in flower. They only sold plants to other growers who finish the plants and then send them on to market. Glen showed a slide of their test greenhouse. Every new plant is tested for about seven years before they start growing them for market. The plants are sold to a nursery at 6 months old, and they will tell the nursery the exact growing conditions and requirements for each plant, and the day that it will come into spike. All the plants must come into spike at the same time, and get sold at the same time.

When Glen was there, the Floricultura nursery was handling about 50 million plants a year. Plants were deflated, sorted, and put into community trays. The plants in the trays would grow uniformly. When the plants were ready, they were repotted by machine. (Glen showed a slide of the potting machine.) Using the machine, three ladies were able to pot about 3000 plants per hour. Frome there, the plants would go onto a conveyor belt, which was monitored by cameras. The cameras sized the plants, and then they were sorted into trays according to size.

Once the plants were potted up, no one goes into the greenhouse. There are no aisles in the greenhouse; all the plants are on moving benches. Each bench has a bar code and the computers use this code to track the location of each plant

in the greenhouse, and when it will be ready to ship. The plants are watered, misted, and sprayed mechanically, which is controlled by computer. This elimination of human contact reduces the likelihood of outbreaks of fungus, bacteria, insects, etc. It is an enclosed, controlled environment. When the customer places an order, a crane brings the appropriate bench out so the desired plants can be packaged and shipped to the market.

There is a flower market outside Amsterdam that is a building with the largest footprint of any building in the world, equivalent to 97 football fields. (Recorder's note: I assume those are American football fields!) It is the fourth largest building in the world, with more than 10 million square feet of floor area, just to sell plants. They have tours but visitors aren't allowed to go on the floor - viewing is from the mezzanine. They sell 20 million flowers a day: cut flowers, orchid plants, cacti, bonsai, and other plants. Items are sold by reverse auction in which the clock starts at a high price and as the price goes down, the first person to bid wins that lot. So you'd better know your prices.

Next, Glen took us to Germany to a family-owned greenhouse, Orchideen Duerbusch, which started by growing complex Paphiopedilum as cut flowers. Their breeding became so fantastic that they started selling plants to orchid hobbyists. Oliver Duerbusch started introducing his complexes at shows around the world. Good complex Paphs can sell for \$500 or even as much as \$2000 each. In their greenhouses, plants are all perfect in every way. They are all watered by drip tubes, no overhead watering. This avoids crown rot and damaged pouches. Because of this, they use a potting mix high in peat moss so that water is wicked through the media.

Also in Germany is Popow Orchids, a small greenhouse with about 2000 sq.ft. of space specializing in slipper orchids. Back in the day, if there was a new orchid coming on the market, Bausche (sp?) Popow had it, whether it was legal or not. The greenhouse is typically German over-engineered, but immaculate. Their potting mix includes peat moss with "young" limestone as a top dressing to provide calcium. They use terra cotta pots, which Glen doesn't recommend for drier climates. Also, terra cotta will absorb salts, to which slipper orchids are very sensitive. For those reasons, Glen uses plastic pots.

Glen showed slides of his own nurseries, built in 2002. He concentrated on *Paphs* and *Phrags*, although most people knew him for his *Phrags*. However, his seedlings and most of his breeding were mostly in *Paph* species because he believes that preserving the species is very important, to make sure they don't become extinct. He gave the examples of *Paphiopedilum sanderianum*, which was thought at one time to be extinct, and *Phragmipedium kovachii* that is endangered in the wild due to over-collecting.

Since selling his business last year, Glen's greenhouses have all been torn down. He built himself a new greenhouse. He was looking forward to going to shows as a hobbyist - on the other side of the table - but then Covid hit and put a stop to that.

When he sold his business, Glen was able to keep 600 plants of his own choosing, mostly Paphs but also some Bulbophyllum and other species. One of his favourites is Paph. helenae, a small plant suitable for windowsill growing. He also showed a slide of a display that he created, including *Paph malapoense*, *Paph. micranthum*, *Paph. armeniacum*, *Paph. sangii*, and others. (You need to be patient with the *Parvisepalum* subgenus - it might take 6-8 months from when it produces the bud until it grows the spike and actually opens.)

In a new greenhouse there are always growing pains, so Glen lost a lot of plants when he moved them from his old greenhouse to his new one. A major difference was that he went from using rainwater to well water. He says he has always had one set of rules for his greenhouse: "If you don't like it, get out!" There is no point in working at making one little group of orchids happy when you really need to look at your overall collection.

One plat that he lost due to the move was a *Paphiopedilum henryanum* 'Haley Suzanne', for which he had received the Butterworth Prize for most outstanding example of orchid culture in 1999, a highlight of the awards that he has received for his plants. His experience is that if a plant gets an award,

it is the kiss of death, probably because you start treating the plant differently for fear of disturbing it.

A lot of people ask Glen when they should repot their plants. He says not to wait until the plant tells you; that could be too late. He repots every two years, some plants every year. The plant needs to have a strong root system and if you wait too long to repot, the roots start rotting. His rule of thumb is if a plant has more than 5% dead roots, then he was doing something wrong. Maybe he waited too long to repot, or watered it wrong, or gave it the wrong potting mix.

Many people leave too many roots on the plant when they repot. Glen showed a slide of a plant with crowded, thick roots, saying he would probably remove half of the roots when he repotted it. He would go into the centre and remove a lot of the centre and lower roots, so he can get new potting mix around all the roots. If you leave gaps around the roots, or if the roots cluster up, they will die. He wants to see root tips and root hairs because this is where the plant will absorb nutrients. If the plant has good roots, it will grow for you.

Glen's basic fir bark potting mix:

- 6 parts medium grade fir bark
- 12 parts seedling or fine grade fir bark
- 3 parts horticultural charcoal
- 6 parts sponge rock
- 1-1/2 parts cracked oyster shell
- 3/4 parts silica sand (pool filter sand)

He doesn't like Orchiata or Rexius heat-treated bark. If he is doing *Cattleyas*, he might use all medium bark but this is the basic mix he uses for *Paphs*, *Phrags, Miltonias, Cymbidiums, Masdevallias, Pleurothallids* - any species that needs a certain moisture level at their roots. Sponge rock will not break down and it will always allow water and air to pass through. Oyster shell adds calcium and magnesium, needed predominantly for the slippers, but he leaves it in there for the other species too. The silica sand will coat the roots of the plant and, as the mix breaks down, this layer allows air to pass through to the roots. When he repots the plant in two years, there is no remaining bark, but the sponge rock, oyster shell, sand, and charcoal remain. These products are fairly easy to find and fairly inexpensive.

It is twenty years (2001) since *Phragmipedium kovachii* was discovered in Peru. In 2003, Glen and a group of people from *Orchid Digest* magazine and from New York went to Peru to see *Phrag. kovachii* in the wild. They were the first Westerners to go into the jungle to see these plants. While there, they also went to see Machu Picchu. There is a mountain behind Machu Picchu with a narrow switchback road that buses use to take people to a tourist centre and hotel at the top of the mountain. It costs \$1800-2500 per night for the hotel, which is not particularly fancy. But when they were there, their contact in Peru was a friend of the hotel owners. The hotel had several vacancies, so the owners allowed them to stay one night for free.

The group included Harold Koopowitz and Karen Mierau from the *Orchid Digest*; Jim Comstock, a talented 3D photographer; Angela Mierau, a botanical artist from Brooklyn who was to do paintings of the *Phrag. kovachi*i; and Glen. Their experience was described in the article, "The Hike from Hell," written by Harold Koopowitz in a 2003 issue of the *Orchid Digest*.

Machu Picchu is a natural habitat for *Phrag. caudatum*. They found it growing on rocks and trees, as was *Phrag. wallisii. Phrag. caudatum*, like most slipper orchids, is generally thought of as being semi-terrestrial, but Glen considers the long-petalled *Phrags* to be more semi-epiphytic. They have been found on trees, on the ground, and on rocks. This tells you that they are plants that like to dry out between waterings. Glen treats them more

like *Paphs*, watering them once a week. He also grows them in much smaller pots so that they won't rot.

The travellers also looked at other habitat sites when in Peru. *Phragmipedium boissierianum* grows throughout South America, and they found it growing in large numbers on roadsides. (If you see an orchid growing on the side of the road, you know it's an orchid that no one wants.) The plants had lots of flowers and seed pods, indicating that they are self-pollinating, and they grow like weeds. Actually, most *Phrags* are self-pollinating if conditions are perfect. Glen has had *Phrag. kovachii* sometimes self-pollinate in the greenhouse.

While there, the group observed that mountain water was continuously running down the mountainsides, dripping past the roots. This is exactly what the plants like. Most of the water was slightly acidic and most of the substrate was acidic as well.

On the morning of their "Hike from Hell" to the jungle site where the *Phrag. kovachii* were said to be growing, they had breakfast at a local restaurant, where they arranged to have dinner later that day after they returned from the trip. Glen showed a slide of the restaurant and the tour van that was to take them to the area. The van had bald tires, a leaking gas tank with a bottle underneath to catch the leaking gas, and other similar features. The van itself was an adventure, but their tour guide was retired military, with many useful connections in the area. That helped to expedite their trip.

Across from the restaurant, people were laying black tarps on the roadside and spreading out raw coffee beans to dry in the sun. The beans would then be put back in the sack and taken to market. Glen was amazed to see that the beans were riddled with worms! He is of the opinion that it doesn't matter where your coffee is grown, it is the variety of worms in the roasted coffee that gives the coffee its special flavour.

Glen then showed a slide of the farmhouse owned by the farmer who had taken possession of the habitat site where the *Phrag. kovachii* were growing. That is the way it is done in the jungle: whoever claims it, owns it.

The group had expanded to include Mark Khachaturian of the New York Botanical Gardens and Dr. Isaias Rolando, the Peruvian contact who set up the trip. Also joining them was Alfredo Manrique, with whom Glen eventually became partner. It poured like crazy the day of their hike, which led to a series of mistakes on their part.

They were told that the area they were going to see was only about 40 minutes away on a meandering trail in the jungle. A lot of them therefore decided to leave their backpacks behind. They also left behind their water. However, it was not a gentle, meandering trail; it was also very sloppy and slippery, with downslopes and rises and streams to cross. Harold was wearing rubber boots, which seemed like a good idea, but the mud kept sucking the boots off and then even pulling off his toenails. He became very dehydrated and quite ill on the way back. The trail was highly travelled by local livestock, which left "land mines" along the trail. These piles of manure had to be avoided if possible. Eventually, after 4-1/2 agonizing hours, all without water, they arrived at the habitat site.

The group estimated that the site held about 3000 *Phrag. kovachii* plants. It soon became apparent that part of the reason behind the offer to take Glen and his group to the site was to try and sell it to them. They were offered the site and the 3000 plants for \$10,000. The downside was that it was illegal to collect and export the plants. They did have a permit to collect five plants and those were the plants that Glen and Alfredo used to produce the first hybrids, and most of the seedlings, that were made available to the public.

As Glen's slide revealed, none of the plants were in flower at the time, but on subsequent visits they did see the flowers. The biggest flower they measured was 9-1/2 inches across! They saw many plants with more than four flowers in a short, closely-spaced inflorescence. Many *Phrags* have very tall inflorescences, but *kovachii* is more compact. This characteristic seems to come through in its hybrids. The group saw a lot of plants with seed pods because *kovachii* are self-pollinating.

After seeing the *Phrag. kovachii*, they returned to the restaurant for dinner. This was the hardest part. They made it back in four hours because they didn't stop to look at anything, but Glen's legs were cramping and Harold was a mess. (Harold's woes did not end there: six weeks after returning home from Peru, he started having fevers and bleeding boils. The doctor eventually found that he had acquired parasites in Peru.) But the hardest part of the trip was climbing the four steps up to the restaurant because they were so dehydrated and cramped. As they sat in the restaurant and relived the trip, they asked themselves, "Would we do this again?" The answer was, "Absolutely, yes we would!"

Needless to say, the site was sold to someone else, and it was completely cleared out. Unfortunately, of all the plants that were pulled illegally from all of the habitats, probably 99% died. They don't like to be bare-root for very long. About 80 or 90 plants were taken illegally to Holland but after 8-10 months, they all slowly died, even though they were being raised by an experienced grower.

The major thing about *Phrag. kovachii* is that its preferred cultural conditions are different from those of nearly every other slipper orchid. The pH of the substrate is 8.7, quite alkaline, and the water runoff is nearly neutral. Water, on the other hand, is usually about 6.5. The pH of the water runoff is probably higher because it runs over the alkaline substrate. This has probably been the problem with trying to grow them, especially seedlings. Glen found the it doesn't work to grow them in sphagnum moss because sphagnum is very acidic. It wasn't until they put them in bark mix and grew them in low light that they started to have more success.

One genetically mutated plant was discovered. It was an albinistic form; the bud cover, ovary, and stem were not coloured, but the petals and pouch were. However, they would not be able to breed that trait into their hybrids. They can only reproduce it by taking divisions.

Glen then showed slides of the hybrids that he and Alfredo have made:

Phrag. Alfredo Manrique (Walter Schomburg x kovachii)

Phrag. Allison Strohm (Living Fire x kovachii)

Phrag Fritz Schomburg (besseae x kovachii) Phrag Glen Decker (Jason Fischer x kovachii)

Phrag Suzanne Decker (Cape Sunset x kovachii)

Phrag Haley Decker (Saint Ouen x kovachii)

Phrag Mem Emma Decker (Don Wimber x kovachii).

They did not have much success breeding a *kovachii* hybrid with a *kovachii* hybrid. The *kovachii* gives the hybrid bigger flowers, but very few other traits are carried over.

Phrag kovachii hybrids will multiply quite quickly if the roots are happy. Glen has started using Growstone, which is expanded recycled glass. It has been used by hydroponic marijuana growers. The pH of this product is high, 8.0 - 8.5. Similar to the pH of the natural substrate upon which *kovachii* grows.

Glen also recounted a later trip he took with his family to Ecuador. They were sidelined by landslides on a trip to the Amazon basin. This also involved a "forty minute hike" around the landslides, which turned into two hours

Over the years, Glen has learned a lot about growing orchids, and he has learned a lot about people and places. Sometimes it doesn't matter how good a grower you are; orchids just do what they want to do. He showed slides of some interestingly deformed flowers. The plants produced these unusual flowers once but never again. You can also get some peloric Pahps. Their flowers are deformed but in this case it's a genetic mutation and they will flower that way every time. Glen once sold a peloric *Paph*. Julius for \$800.

Glen then took questions from the Zoom audience.

- Q. When deflasking *Phrags*, what do you use for a growing medium and how do you suggest starting them out?
- A. I use the mix that I suggested earlier, but with all fine fir bark, no medium. If it's not kovachii, some people are successful with sphagnum moss and some are successful with rock wool. But rock wool is very sensitive to water. For example, it doesn't work very well in California, but is quite successful in the UK. Remember that flasks are low light and when you first plant the seedlings out, make sure it's low light. In their greenhouse, they shade kovachii at 98%. Also, if the day length is longer, the light level needs to be reduced. In nature, seedlings are growing deep down in high grass, so they don't get much light. I recommend 300-500 foot-candles. Keep them moist, not wet. Mist them, rather than water them. Fertilizing the plants depends on the amount of sun they get. In California in winter, they get very little sun, so they should be fed very little. In summer, I target 125-150ppm nitrogen. If they get a week of bright days I might feed them more heavily; if they get a week of rain, I might not feed them at all. If you're growing under lights, you have more consistent conditions, so you would feed them on a more regular basis.
- Q. What size pots do *Phrags* like?
- A. I like to keep my plants in smaller pots because I'm better able to control the amount of water at the roots. If they get too much water, the roots will rot. I water my *Phrags* once, maybe twice, per day in summer; three times per week in winter. Don't over-pot them.
- Q. I was given a *Phrag. kovachii* x *czerwiakowianum* five years ago, but have been unable to make it flower. Can you suggest a substrate and environment to get it to bloom?
- A. You have to understand that most *Phrags* are just a pain in the ass. Some hybrids flower more readily than others. In the case of this particular hybrid, I don't think I've ever been able to flower any of mine. If you are growing on the windowsill or under lights, you are probably not giving it enough light. In their natural habitat, both the parents probably get close to 100% light. But if you give them that much light here, they will burn. Other than that, maybe just try something different. If you've been growing them the same way for the last 5 years, you need to do something different. If the something different kills the plant, well, then you've just learned something!
- Q. When trimming roots of *kovachii* and other *Phrags*, do you cut them at the base of the plant or do you nip the ends of the roots off? If you nip the ends off, does the root eventually die?
- A. It depends on my mood and on what I'm cutting off. Sometimes I'll just grab a handful and rip a bunch of roots off. A broken root with die where it broke. A cut root will split off above the cut and grow new roots. Sometimes Phrags will have 2-3 foot long roots. You want to get rid of all those roots. Sometimes I'll get rid of 80% of all the roots, but if the plant its healthy and in growth, hit will replace all those roots in a couple of months. But if you try to jam all those roots back into the pot, most of them will rot anyway. When I'm cutting out of the centre, I cut the roots off at the base of the plant and kind of hollow its out so the potting medium can get right up inside the hollow. When it comes to the sides, if I'm able to get the plant in the pot and get the mix all around the roots, I feel that is sufficient.
- Q. When you repot, and you are waiting for the new growth to start, are you waiting for the new roots as well?
- A. I will repot any time I feel like it, even if the plant is in spike or in flower. I had one *Phrag*. Niicholle Tower in flower for 12 years; I couldn't wait for it to stop blooming to repot it. Most slipper orchids aren't too worried about when you repot them. Ideally, you should repot in the spring because that's when most plants are going into growth. However, a lot of *Phrags* bloom in the summer, so you should repot those in the fall.

Q (a). Is Growstone a widely available product?

A (a). I believe it comes from California. There shouldn't be a problem getting it in Canada because it his synthetic and sterile. Try a hydroponic grower

Q (b). I have had some *kovachii* seedlings for 8 or 10 years and they have't grown. I keep my water pH around 6, which isn't best for *kovachiii*. I would rather not change my water pH so if I could get a product that would give a higher pH in my mix, that would be much handier.

A (b). That is why I started experimenting with it, because you can't cater to just one group of plants. For Phrags, and especially kovachii, water quality is huge. When I moved to my new greenhouse all of my *kovachii* and one *besseae* died. Sometimes when you buy a plant from a grower, the plant will just die. Not because you got a bad plant, but because the plant didn't like the change.

Q. In the presentation there was a variety of watering techniques, ranging from using a hose over top of the plants, to an in-pot drip system. What do you use?

A. I use a hose a spray water over the top of my plants. If you have healthy plants and good air movement, you shouldn't have a problem with crown rot or bacterial or fungal infections. A bacterial infection like Erwinia will attack weak plants, but good air circulation will help. In the jungle you don't see anyone sitting there dabbing out the wet crowns! I go with the premise, "If you don't like it, get out." I can water 800 plants in 25 minutes with my spray method.

Q. What do you use for fungal control?

A. Listerine mouth wash, the Original. I don't take any preventative measures. I don't use any chemicals on the plants. If a plant has a fungal infection, I will cut the infected area away and spray with 100% Listerine. You could also use peroxide or alcohol, but I worry that it is a desiccant. Neosporin ointment works too. I try things that I can get at my local drugstore, as opposed to chemicals that will kill me as well as the bug. I find the oils more useful than insecticides. Although cinnamon works for fungal infections, I don't use it because it makes the plants dirty. For bug control, I use SuffOil-X, an ultra fine petroleum-based horticultural oil produced by BioWorks, which also works as a fungicide and miticide. The oil coats bugs and suffocates them, or encapsulates spores and stops them from spreading. It will take a little while for the oil to kill the bugs. A 2-1/2 gallon jug costs \$50-60USD but you only use 1 to 1-1/2 tablespoons per gallon of water. Once you open it, it will start to separate so you have to shake it up. You might also get an ammonia smell but that doesn't hurt the plants. Another similar product is Sunspray Oil. Don't use mineral oil or dormant horticultural oil; they are too thick. The oil coats the insect or spore but it also coats the stomata of the plant, so certain plants will die from the oils. For example, Dendrobium cuthbertsonii does not like oils; it will die. A lot of the New Guinean Dendrobiums should not be sprayed with Sunspray Oil or horticultural oils. I've used oils successfully on Phalaenopsis, Cattleya, and most Masdevallia. I don't like to use Neem oil because it has some toxicity towards humans: I don't want to use anything that needs gloves or respirators. However, it is a natural product so I consider it to be better than insecticides. Some insecticides come from chrysanthemums, but they are highly toxic. Just because they are naturally derived, it doesn't mean they are safe. I've got to the stage where, if the plant isn't important to me, it goes straight into the garbage because you are taking the risk of it infecting other plants in the greenhouse. The same goes for using pots over again; you are putting a \$50 plant into a used 10-cent pot?! Just throw the pot away and get a new one. Don't take the chance of moving problems around.

Q. Have you heard of Brand X? It is a silicone based non-toxic foliage cleaner that smothers insects. It seems too work well for all insects, including scale, mealy bugs, etc.

- A. I have not heard of it but it probably works on the same premise as SuffOil-X or Sunspray.
- Q. What causes brown tips on Phragmipedium leaves?
- A. Usually it is water quality, salt buildup, especially in species. Species need very pure water; they really need rainwater or reverse osmosis water. If the salt levels are too high, it burns the root tips, which goes on to the leaf tips. By the time you see it on the leaves, the roots have already been damaged. Even if you correct the water quality, it will probably take a year to grow out. Some plants get it more easily than others, for example, some *Phrag. schlimii, Phrag. pearcei*, and *Phrag. besseae* hybrids. You don't see it so much on long-petalled species. If you don't keep the potting mix clean (i.e., repot), the salts will accumulate in the pots. If you are using straight tap water or well water, that is probably the problem.

Calvin and Tracey both thanked Glen for his marvellous presentation. The OSA and MOS then left the meeting and the SOS meeting continued.

SOS Business Items:

Plant Order Committee Duties

- Description of duties was circulated with the newsletter.
- Heather Anderson and Cheryl Adamson at present.
- · Cheryl is stepping down.
- David Schwinghamer has been nominated as Acting Member of the committee and is already working hard tot help with the Ecuagenera order. He will remain as an Acting Member until we can have an election.

Speaker Coordinator Duties

- Description of duties was circulated with the newsletter.
- Heather Anderson at present.
- Tracey thanked Heather for all her work as Speaker Coordinator.

SOS Plant Orders:

- Heather reported that the Ecuagenera order totalled more than \$10,000, so we got a 25% discount. She will contact people for payment in advance, once she receives the invoice.
- The Paph Paradise/Gold Country Orchids order is delayed until May.
- The first deadline for the Orchids in our Tropics order is March 8. They
 will then restock and publish a second plant list with a second deadline.
 Delivery will be in April.
- The deadline for the Ching Hua order is March 20, for delivery in May or June. It will be shared with the Foothills Orchid Society, the Orchid Society of Alberta, and the Orchid Species Preservation Foundation.
- Tracey thanked the Plant Order Committee for bringing us these opportunities to purchase plants under such difficult conditions. Heather thanked Dave for all his help.

SOS Problem Corner:

No problems were presented.

General Feedback and Questions:

- Don Keith believes the Growstone company has folded but Resources has 6 or 7 3-L bags of 2 different sizes for sale. There will be a limit of 1 bag/person. He will write an information piece for the next newsletter.
- Question: Has anyone used limestone meant for livestock for growing orchids? A. Tracey has used some for top-dressing, also a little bit of silica sand. She suggests trying it on 1 or 2 plants first, to see if it helps.
 Resources has oyster shell for top dressing; it is very inexpensive.
- David Schwinghamer thanked everyone for all their hard work in keeping the Society active in these difficult times.
- The next speaker will be Marni Turkel from California.

Meeting adjourned at 4:58 p.m.

ORCHID MARKET

Don Keith will provide orchid supplies to SOS members, orders to be placed once monthly, on the Friday before the monthly meeting. Orders will be ready for pick up after 11:00 a.m. the Sunday following the monthly meeting. Please pay with exact cash, by cheque made out to the SOS, or pay Don by e-transfer. Email Don at **donkeith@sasktel.net**

For March orders, email Don by 8:00 p.m. Saturday, March 27, 2021. He will have your order ready for pick-up from his house after 11:00 a.m. Sunday, March 28, 2021.

SOS ORCHID SUPPLIES

ITEM	DESCRIPTION	PRICE
Fir Bark	3L bag fine or medium (please specify)	\$6.00
Orchiata Pine Bark	3L bag fine, medium or med-coarse (specify)	\$6.00
N.Z. Tree Fern Fibre**	3L bag, 1/4 - 1/2" or seedling mix	\$8.00
Perlite	4L bag medium/coarse	\$4.00
GrowStones**	3L bag, 1/4 - 3/8" or 1/2 - 3/4"	\$6.00
Sphagnum moss, N.Z.	8L compacted 12L compressed	\$12.00 N/A
Grodan Grow Cubes	3L bag, 0.4" cubes 7L bag 0.4" cubes	\$5.00 \$10.00
MSU fertilizer	1 cup 13-3-15 for tap or RO water	\$5.00
Oyster shells	1 cup bag	\$0.25

ITEM	DESCRIPTION	PRICE
Inflorescence clips	Small, brown or green	10 for \$1.00
Rhyzome clips	Small Med/Large	\$1.00 \$1.25
Clear Pots	2 1/4 x 2 1/4 square	\$0.50
	2 1/2 x 2 1/2 round	\$0.50
	2 3/4 x 2 3/4 round	\$0.75
	3 1/4 x 3 1/2 round	\$1.00
	4 x 4	\$1.25
	4 1/2 x 4 1/2 slotted	\$1.50
Net Pots	3"	\$1.25
	3.5"	\$1.25
	5"	\$1.50
	6"	\$1.75

^{**} See next page for more information

SOS ORCHID SUPPLIES

Our Resource Table has added a couple of new products in limited amounts.

PLEASE NOTE: because we have limited supply of these products, we are limiting initial purchases to one bag of GrowStones and one bag of Tree Fern Fibre per member.

GrowStones Made from recycled glass and limestone, a durable and water-retentive, porous additive meant to replace perlite in orchid mixes. It comes in 2 sizes, 1/4 - 3/8" and 1/2 - 3/4". The larger sizes provide superior aeration and drainage as compared to perlite.

GrowStones has a relatively high pH of 8.2. This is ideal for many orchids, specifically Phragmipedium kovachii and many Paphiopedilum that grow on limestone. It is not suitable for orchids that require a growing medium with lower pH.



Image from https://www.htgsupply.com

New Zealand Tree Fern Fibre Tree fern fibre comes from the chopped strands of fibre in the trunks of tree ferns and have the appearance of little sticks. It is a useful addition to bark or sphagnum-based orchid mixes as it keeps the media open for better aeration and drainage in the root zone. Tree fern fibre has good water retention and capillary action that helps distribute water through the media. Tree fern fibre is long lasting and pH stable.

We have bags of 1/4 - 1/2" fibre and also a seedling mix. The seedling mix has about 5% charcoal and about 15% styrofoam balls included in with the tree fern fibre.

Editor's note: If you want more information about tree fern fibre and the New Zealand trees from which it is harvested, there are a many articles in the AOS Orchids Magazine, including:

October 2020, written by Graham Ramsey "Repotting in NZ Tree Fern Fiber" July 2018, written by Alan Ford "Sustainably Harvested Tree Fern".

Contact our Librarian Deb Huculiak to borrow these from our library holdings!



Image from https://acadiansupply.com/products/tree-fern/

SOS MEMBER PLANTS FOR SALE

For sale by Jen Burgess

jenn.b@sasktel.net

Epilaeliocattleya Magic Wand

(Epicattleya Kyoguchi M. Sauno 'Mutation' x Laeliocattleya Trick or Treat 'SVO' 4N)

From Sunset Valley Orchids, in a 3-1/2" pot. \$5

Photo: bud opened on March 5. It's been grown under T5

lights alongside Phalaenopsis.



For sale by David Schwinghamer

dms-2019@protonmail.com

Cattleya skinneri Alba 'Alcemi'

6" pot, 3 old growths, 2 new growths. \$15

Drosera dichotoma 'Giant'

Carnivorous sundew plant which will eat fungus gnats. Needs high humidity. \$10

Neolauchea pulchella

Grown in orchidarium. 9 pseudobulbs. \$10





Neolauchea pulchella



Drosera dichotoma 'Giant'

Cattleya skinneri Alba 'Alcemi'

For sale by Heather Anderson

heather.jane.anderson@gmail.com

Lockhartia oerstadii

2 available for sale. Both have 4 branches. Blooms are yellow. **\$5 each.**



SHOW AND TELL

Grown by Calvin Lo





Dendrobium senile
A white-haired furry
Dendrobium grown
mounted on cork.
Enjoys a dry winter
rest, and lusciously
warm rainy summers.







Jumellea densifoliataA Madagascan lithophyte with a delectable long spur.

Leptotes bicolor

An easy grower with terete leaves. Some chlorosis from a fertilizer mishap several years ago!







Aerangis fastuosa

Another Malagasy bloomer with a strong evening fragrance of vanilla and jasmine.





Dendrobium trantuanii

A Vietnamese *Dendrobium* with a remarkable furry brown lip, likely to mimic and attract some sort of bee or beetle pollinators.







Dendrobium officinale

The canes are dried and used in traditional Chinese medicines. A floriferous spring bloomer that reminds me of forsythia. Keikis available.

Grown by Sherry Fensom



Coelogyne ochracea

(I believe it's now called *Coelogyne nitida*.)

I received this orchid with a new growth from the Terry's Orchids order we received last year. Very happy that it has provided me with some blooms so soon after receiving it, but I can't take credit for the blooms. So far, all my *Coelogynes* seem to be doing alright in the home environment.



Dendrobium Red Senator 'Maxim'

I purchased this from Clouds Orchids. I grow it in my home, with a winter rest on my windowsill in a room with a daily temperature range of 11-19C in the winter months.

Grown by David Schwinghamer



Ludisia discolor x Anoectochilus Roxburghii

A very vigorous hybrid with cute white flowers contrasting against the red leaves. Appears to be a sequential bloomer. One of the easiest growing jewel orchids in my collection. I found this plant at the Little Big Plant Shop mislabeled in a box of *Ludisia discolor* seedlings. However, the brighter red colour, lack of metallic veins, and hybrid visor, clearly point to it being the common hybrid.



Masdevallia Angel Heart

I bought this plant from Don Keith last September. It grows well in my orchidarium with minimal care.

Grown by Pat Randall



Cattleya schroederae var. alba

This species originates in Columbia. I got this plant in spring, 2013, at the Edmonton Orchid Show from Maldawn Orchids (Don Hawker, an Edmonton member). I believe he grew them from flask and had a few NBS plants to sell. It has bloomed in spring every year since, often going to the Edmonton shows for our display. It is a standard size *Cattleya*, with 5" wide blooms. It seems fairly easy to grow and bloom. Mine is currently in Orchiata bark and I grow it under light, and water when it is dry.

Grown by Bob Lucas



I made this cross from a selected clone of Orchidview Tabasco that Katherine picked for me. When the first one bloomed, I thought it was good enough to ask Katherine Norton if I could name it in her honour. She agreed and three months after I registered it, she fell and died of complications from a concussion. I wish she could have seen this clone, the best one yet.

Phalaenopsis Katherine Norton '#9'



Phalaenopsis Mem. Vivian Orban An old cross named after a good friend.



Phalaenopsis Tying Shin Blue Jay

In 2018, while touring in Taiwan, I came across a greenhouse with a sea of green *Phalaenopsis* in the middle of which rose one solitary spike of this plant. I had to have it and promptly killed it, but not before I made a stem propagation.



I made this cross with Precious Buddha and Ching Rueys's Blood-Red Sun. I only got two seedlings and brought this one to flower. I wish I had more.



Grown by Heather Anderson



Oncidium eurycline

Grown in an orchidarium. First mounted in 2011. The mount was deteriorating, so I removed the plant from the original mount, cleaned up the plant, and mounted its on a new mount. It is watered automatically for about 90 seconds once/day, and the humidity in the orchidarium usually registers at 99%.





Phalaenopsis Sogo Vixen

Purchased at the 2019 SOS Silent Auction as a no-name orchid. This is the first time it has bloomed for me. It is grown in a greenhouse under lights.

Brassavola nodosa hybrid

This is grown in a warm greenhouse under lights. It is a real labour of love. I purchased the plant in 2003 and it has been reported twelve times. I cannot remember when it last bloomed.

Grown by Tracey Thue





Coelogyne marmorata

A species native to the Philippines, I purchased this plant from Terry Letendre at the OSA show in 2017. It seems to like being potted in a sphagnum lined wooden slat basket with large Orchiata bark providing a free-draining medium with humidity at the root zone. This, along with my other Coelogynes, grows under lights with intermediate temperature during the winter, and outside in bright indirect light on my front porch in summer. It gets lots of water and fertilizer in the summer.



Epicattleya Magic Wand

This is *Epicattleya* Kyoguchi 'M. Sauno Mutation' x *Laeliocattleya* Trick or Treat 'SVO' 4N, purchased from Fred Clark, Sunset Valley Orchids in 2017 when he visited us.

It flowers faithfully every spring with 10-15 flowers when grown in my south-facing living room window during the winter and outside in bright indirect light in summer. The flowers are actually a bit more yellow than shown in the photo. The Kyoguchi parent is highly fragrant, and

THE ROOT TIP



Cymbidium orchids float on a raft in the Shinjuku Gyoen Park Glasshouse, Tokyo Photo: Sandra Simpson, Tauranga Orchid Society

I was feeling uncharacteristically peevish the other day as I realized that true spring is still a couple of months away and that the pandemic is dragging its inexorable self into another spring, and probably summer, too. What to do when the garden won't be green for *weeks* and I'm ready to crawl out of my house-bound skin? Why, go on a virtual orchid tour, of course! And I quickly discovered that I wasn't the only one trying to break free. Sandra Simpson, of the Tauranga Orchid Society in New Zealand, was feeling the same thing, *last May*. (I wonder how she's feeling today?) She posted an article titled, "Armchair Orchid Travel: Shinjuku, Tokyo." The photo above was one that particularly caught my eye. *Cymbidium*, floating on a raft in a pond, in a glasshouse. Can it get any more magical than that? So evocative of the tropical world beyond our late winter and Covid-restricted lives. Oh, to be standing pond-side and breathing in warm Cymbidium-scented air. Or to be a butterfly, resting on a lily pad and soaking up the heat. I have to believe that there would be butterflies.

To see Sandra's full article, and to browse the rest of the Tauranga Orchid Society's Blog, go to: https://taurangaorchids.wordpress.com/2020/05/03/armchair-orchid-travel-japan/

Happy Travels, Tobi Fenton