Massachusetts Orchid Society

P.O. Box 1041 Medford, MA 02155



JAN 2023

INSIDE THIS ISSUE

Minute Minutes

Annual MOS Award Recipients

Upcoming Events

Potluck & auction pics

Upcoming Orchid Shows

Article: "The Era of Cheap Orchids Could Soon Be Over", James Wong

Article: "What I Use for Indoor Orchid Growing", Steven Kirincich

Article: "My Quest for the Perfect Misting System", Millard

Hennessee

The AOS Corner: *Greenhouse Chat with Ron McHatton & Seasonal Care*

Officers, Directors & Chairs



- The board is contemplating changing board meeting times and dates to accommodate directors who face challenges to attend meetings. We are exploring mandatory quarterly, in-person meetings with the option to go virtual for the remaining months. Another possibility is to meet occasionally on either a Saturday or Sunday, as that would alleviate issues.
- SOI manager Bridget Kimball will be discussing our future MOS contract with Amanda this month. The 2023 show, held the first week of November, will cost \$4,000. We need to sign a contract ASAP to lock in the dates and the cost.
- Amanda will present the 2022 treasurer's report at our next board meeting. The report will be posted in February's newsletter.
- This month MOS member Mike Badia gives a presentation on growing Paphs and Phrags in the home. We will have Chuck Anderson in February for a talk on dendrobiums and in March, Daryl Yerden lectures us about pests and diseases. In April Kelly McCracken of High Desert Orchids will tell us all about fragrant miniatures.
- CALLING ALL BLOOMERS! We need yours for our upcoming Cape & Islands display (more show info., p. 5). Email Brigitte Fortin by Jan. 14th, at bfortin425@MSN.com if you have plants to exhibit. Remember, only healthy, pest free plants! Also, volunteers are needed for set-up Thurs., Jan 19th and break-down Sun., Jan. 22. Again, please let Brigitte know.
 - Riding on those coattails is the New Hampshire Orchid Show, Feb. 10-12.
- Last, but not least, we are still missing yellow show signs. If yours is at home, in the trunk of your car or tossed in your neighbor's yard PLEASE RETURN IT AT THE NEXT MEETING. They're not cheap, and you'll be saving us quite a bit of \$ by not having to replace them. Thank you!

Did you know that you can submit articles to the newsletter? Got extra orchid supplies you want to unload or looking for garden swaps? Submissions are due 14 days prior to monthly meetings.

Email Anne at newsletter@massorchid.org to post or advertise.

Got extra orchid supplies you want to unload? Looking for garden swaps? Advertise right here in our new Minute Minutes Member's Classified section. Email Anne at newsletter@massorchid.org to post in the next newsletter.

We are always interested in suggestions for speakers and topics, and special programs for upcoming general meetings. Please email your thoughts to mos-board@googlegroups.com.

Find us on Facebook at www.facebook.com/massorchid and Instagram at www.Instagram.com/massachusettsorchid.



Congratulations to Linda Abrams for receiving this year's Orchid Digest Diamond Award and to Jeff Feldman for receiving the Charles H. Briggs Memorial Award for Excellence.

In recognition of your outstanding and unwavering service to all things MOS, thank you both!

Read Linda's award biography in the upcoming April edition of Orchid Digest or go online to their website.



Message from the President

Happy New Year!!



As we conclude 2022, I wanted to extend a huge thank you to all the folks who helped make the MOS calendar of events this year a success. Without you, it would not have been possible. The after-hours helpers, the late-night emails answered, the greeters by the door... every single person has contributed to making 2022 a fantastic year.

As we start a new year, we need to lay out a road map for the future. With that in mind, MOS runs a marathon from midsummer until late fall with major events every single month.

While we manage to pull it off, I hope in future years we might adjust the schedule to spread some of the load and provide the best quality events for each of you to enjoy. We are always dreaming up ways of improving our experiences and I think this is something we as a community need to discuss. Please join us in this coming year's discussions about what you'd like to get out of the society & how we can come together as a community to enrich each others lives.

I wanted to say again thank you for all our dedicated members, we love seeing your faces and seeing all the stunning orchids you've grown and I'm excited to attend the first meeting of 2023 on January 11th, 7:30pm.

See you all there!

Dina

UPCOMING EVENTS

Monthly AOS Judging at Tower Hill

07 Jan 2023 10:30 AM Tower Botanic Garden, 11 French Dr., Boylston, MA

Please visit our website: nejcaos.org

Monthly Meeting

10 Jan 2023 7:30 PM Mike Badia on Paphs and Phrags Sons of Italy, 117 Swanton St. Winchester, MA

Monthly AOS Judging at Tower Hill

07 Jan 2023 10:30 AM Tower Botanic Garden, 11 French Dr., Boylston, MA

Please visit our website: nejcaos.org

Cape and Islands Orchid Society
Annual Orchid Show and Sale
21-22 Jan 2023 9AM-5PM
Resort and Conference Center,

35 Scudder Ave., Barnstable, MA

A HUGE shout out to all who donated plants, books and miscellaneous items (oh yes, and the WINE) to our annual holiday pot-luck auction. We had a great turn out and the event was super fun. Everyone's blooming orchids made lovely centerpieces and the food was absolutely delicious!

Mike Badia presents "Growing Paphs and Phrags in Your Home"

Mike has a lifelong obsession with both houseplants and gardening, but he was first exposed to orchids in 1982 and was immediately hooked. He now grows (and kills) orchids on windowsills, tiered LED light carts and more recently a basement grow room with LED lights. Most of Mike's orchids summer outside, hanging under a 60% shade cloth. Mike grows a variety of orchids in his large collection, but tends to favor Paphs, Phrags and Catts.

Mike is currently an active member of the Massachusetts Orchid Society, including serving on the Board. Below is Mike's Paph. insigne 'Harefield Hall', which took the Jim Campbell Memorial Trophy for Best Cypripedium Alliance at the 2022 New Hampshire Orchid Society Show. Beautiful job growing, Mike!



















The era of cheap orchids could soon be over

James Wong, The Guardian Sun 13 Nov 2022 03.15 EST

A moth orchid grower shuts up shop, one of many vast scale plant providers debilitated by energy price spikes.

A few weekends ago, visiting one of my botanical buddies over in the Netherlands, I was taken on the most eye-opening nursery visit of my life. During lunch he announced, with characteristic Dutch directness: "Do you want to see a room of 2m orchids? You



should take pictures, as after this winter this will only be seen in history books." With an offer like that, who could say no?

A short drive later and we were sliding open the doors of one of the largest moth orchid growers in Holland, who had announced only earlier that day that they were shutting up shop after decades in business. Glasshouses the size of football pitches had been entirely emptied, the plants having been evacuated to smaller sections to save heating costs. A good 10-minute walk through abandoned corridors, I stepped into a misty room – easily double the size of the baggage claim halls of most international airports – where tables of closely crammed plants sat in full, dazzling flower.

"This is just where I experimented making new cultivars. It's all going to be binned soon, take what you want." It's difficult to visualize quite how many 2m plants really is, but walking through room after room, I began to realise why almost everything had been run by robots, shifting oceans of plants destined for markets from Dubai to Dunstable.

Recent spikes in energy prices have had a debilitating effect on the grower, as heating these enormous landscapes to subtropical levels was one of the business's key costs. It's a phenomenon that, apparently, has not only affected this supplier. Some industry insiders are predicting as many as half of such growers may no longer be trading by the end of the winter.

The business model of many of these producers was based on fulfilling the demands of giant retailers for ever-cheaper plants – conditions that could only be satisfied thanks to the economies of scale to be had from growing to vast scales on tiny margins. But this left very little slack in the system to cope with any change in costs. "We are selling plants for €1 that are now costing €5 to make. It's a disaster," he said.



'Artificially low prices have created a throwaway culture.' Photo: Valentina Zavrazhina/Getty Images/iStockphoto

I have always been torn about plant prices. On one hand, the drive to make plants cost ever less has meant the increasing dominance of a few industry giants that stock an ever-more narrow range of mass-produced offerings. On the other hand, it has meant that species such as moth orchids have been turned from collector's item for the wealthy to something within reach of almost anyone at supermarket checkouts.

However, the downside of this is, much like fast fashion, these artificially low prices have created a throwaway culture where once-prized plants are just binned when they stop flowering. With the current cost of living crisis, it's difficult to argue that we should all be paying more for luxuries like plants, yet it's years of undervaluing their true cost that has got us to a very precarious place. While the knock-on effects haven't been seen on our shelves yet, maybe over the next few months we will begin to learn to truly appreciate these everyday wonders.









Amherst Orchid Society Show February 25 - 26, 2023

Smith Vocational and Agricultural High School, **80** Locust St Rt **9**, Northampton, MA **01060**

JAN 2023

What I Use for Indoor Orchid Growing

Steven Kirincich

For many years I grew orchids indoors because my rental situations did not make it possible to seasonally move plants in and out of temporary living spaces. One landlord was upset to see me growing cherry tomatoes and basil in pots outside! Had I been willing to move plants in and outside seasonally, I would have been too uncomfortable to consider erecting a temporary outdoor shade structure; a better arrangement would have to wait until I owned a house.

After getting married almost twenty years ago and moving into our current house a few years afterwards, I finally had the opportunity to design indoor and outdoor spaces for my orchids. I continued using Ikea pine shelving and fluorescent shop lights in an unused upstairs bedroom. Eventually this space would become the property of one of our daughters and the orchids, shelving, and lights were moved to the basement with my fingers crossed. In some ways the basement is a good space due to its relative temperature stability, but that particular temperature was still too cold for most if not all of my plants. Some plants were more tolerant than others. Although not appreciated at the time, temperature control was only one of the challenges that would not be properly addressed until later. Did I forget that these are tropical plants? My selective memory has protected me from the reality of the ensuing botanical carnage.

My basement grow area has morphed considerably over 15 years, and I describe some of the critical improvements below. I believe my improved results are the culmination of greater powers of observation, better knowledge and appreciation for root growth.

Watering

Dragging plants to the closest sink was no longer an option (in the basement) although I did use the upstairs shower when I was growing in an unused bedroom. I purchased a portable spraying setup that consisted of a storage tank, a watering wand, a pump and a small 12-volt battery. It has worked well for many years, but the system has been modified to better suit my needs. The following items make up my hand-watering system:

- 1. Fimco® 12V On-Demand Sprayer Pump, 1.2 gallons per minute
- 2. Solo Plastic Universal Replacement Spray Wand, 28"L
- 3. Water storage bucket/tank
- 4. Car battery recently upgraded to a 12-volt (4 amp) DC power supply
- 5. Flexible tubing of needed length in case more than one grow area needs to be reached
- 6. 3'x3' plastic Botanicare hydroponic trays

Early in, I acquired trays from an MOS auction and bought sheets of egg crate light diffuser panel so that the plants could sit above the water. To avoid dealing with the accumulation of water, I now use large (3' x 3') Botanicare trays that allow for drainage to waste containers. In the past year, I have added a reverse osmosis water purification system to provide pure water when growing inside. I purchased my unit from the First Rays website, but there are many other options.

Lighting

For years I had relied on fluorescent shop lights, and I should not have been surprised by the unspectacular results. I eventually upgraded to T5 54-Watt high output lights and finally to LED grow lights designed for orchid growers. I recommend avoiding LED shop lights, used, discounted non-LED grow lights, and highwattage LED grow lights designed for cannabis growing. The current understanding is that LED grow lights might appear to be not as bright as LED shop lights, but the more important fact is that the former provides a spectrum of light that more effectively supports photosynthesis. The High Desert Orchids and AOS websites have excellent information about LED lights. I have LED lights from the following sources:

- 1. Spider Farmer
- 2. BotanicalLEDs formerly The Orchid Hobbyist
- 3. Barrina Lighting



Heat & Humidity

My current setup uses small heaters designed for greenhouse applications. It is wise to stay clear of heaters that are not intended to operate in damp spaces. When I switched from fluorescent shop lights to LED grow lights, thermostatic-controlled heaters were needed due to the low heat output from the LED lights. I am in the process of trying to find a programmable thermostat that would allow for a warmer climate when the lights are on and a 5-10 degree drop when the lights are off.

I have used small, portable home humidifiers that worked well, but the seemingly constant need to refill the reservoirs have pushed me to switch to a humidifier system that can be used with water buckets or barrels of virtually any size. I have included photos showing my use of fans, heaters and humidifiers.

I use the following heaters and controllers:

- Bio Green PAL 2.0/USDT Palma Greenhouse Heater incl. Digital Thermostat
- 2. Dr Infrared Heater Greenhouse 3,000-Watt Garage Workshop Portable Heater
- 3. Biogreen Thermo 2 Digital Summer/Winter Thermostat



Had I recognized the importance of humidity, I would have probably gone through more humidifiers. I do not believe that keeping potting plants on a tray filled with water and stones meaningfully improves local humidity. In addition, fellow growers have told me that humidity will not be significantly be increased by having a fan blow on an open container of water.

Humidification Equipment (House of Hydro):

- 1. 3 Disc Mist Maker with Float & Spare Discs
- 2. Inkbird Humidity Controller
- 3. Waterproof fan kit
- 4. Any bucket, barrel or other container able to hold water

Just recently, I have combined storage containers for watering and humidification. I now use a 30-gallon plastic drum that cost only \$10. I will have to see if the small amounts of fertilizer have any adverse effects on humidification. I find that the under-stairs space needs much more frequent humidification than the grow tent (see discussion below).

<u>Airflow</u>

At the moment, I have two Air King fans in the under-stairs grow room that each run for 12-hours each day. The quality is very good and the prices are consistent with the quality. I cannot use their oscillating models since they are pole-mounted (pedestal) and do not fit into my spaces. The grow tent has a small oscillating fan that is clipped to one of the overhead poles that is part of the tent's internal frame structure. I will be thrilled if this fan lasts more than six months. Since I can maintain 70% humidity in my grow spaces, the importance of good airflow cannot be over emphasized; still humid air can create a breeding ground for mold and fungi along with other problems associated with persistently damp leaves.

I have recently been able to expand my basement growing area with the use of a 4' x 8' grow tent purchased from Spider Farmer. Although the tents are marketed to cannabis growers, they can also provide a relatively inexpensive way for orchid growers to create a warm, humid, and breezy microenvironment without incurring the expense of heating an unnecessarily large space. Similar to its camping cousin, the grow tent consists of a tubular steel skeleton with a durable fabric skin. The tent also has a reflective mylar coating on the skin's interior surfaces, multiple zippered doors, flaps, and ports that make it easy to provide electrical connections. In addition, there is a second layer of fabric on the tent floor to contain minor leaks or spills. Generally speaking, there are a number of products designed for cannabis growing that can be used by orchid hobbyists and are available at reasonable prices in both new and used condition. The pictures of the exterior and interior of the grow tent provide some views to help readers understand the arrangement. Assembly is a bit of a challenge, but I have no regrets. The interior photos show two 3'x3' plastic Botanicare hydroponic trays I use. These can be drilled and equipped with drains so that plants are not sitting in puddles. I actually put a strip of plywood under one side of each tray so that the slight pitch improves drainage. The trays are sitting on makeshift tables made from 2x4 lumber.

I have looked but have yet to purchase any atmospheric monitoring equipment that connects to the house WiFi and continue to consider the benefits of being able to remotely monitor the conditions in the grow spaces. With the exception of a few family vacation trips, I am generally not away from the house for more than a few days. I am lucky to have a friend who lives nearby, and we help take care of each other's plants when needed. Mist King is one system for automated misting that could help if prolonged absences are expected. Millard Hennessee has told me about a relatively affordable misting system from mistcooling.com.

(https://www.amazon.com/dp/B06XVJMNFD?psc=1&ref=ppx yo2ov dt b product details). (See related article on misting systems by Millard Hennessee on page 10.)



Another aspect of growing orchids is how to simplify the tasks of delivering water to the grow room storage tanks and how to remove the excess water that drains from the potted plants.

Since I am not growing in a greenhouse and do not have the luxury of letting water to drip onto the ground, I collect a good amount of water that needs to be carried and dumped into the basement sink. Hauling 5-gallon buckets to the sink is not fun! I have recently acquired a two-way pump that should make it possible to refill the grow room water tank from the tank near the sink that is also near the reverse osmosis sink. The pump should also be able to pump waste water back to the sink which is 40 feet away from the grow areas.

Please contact Steve (<u>skirincich4@gmail.com</u>) if you have questions, recommendations, dire warnings, relevant or not so relevant tales of woe or success.



My Quest for the Perfect Misting System

By Millard Hennessee

As all of us are prone to do, we leave our orchids unattended for several days to several weeks. If we are lucky, we have a friend or family member conversant enough in orchids to keep them alive until our return. What about the 95% of us that don't have that dedicated person? Well, we just hope for the best. We turn down the temperature, reduce the lighting, and pray to the Orchid Gods. Forget about keeping mounted orchids alive. Hide them in the potted plants and place them in saucers of water with gravel and hope for the best. NOT! I decided that if I was to grow mounted orchids under lights, I would not depend on my son driving 90 minutes to keep the mounted orchids alive. I put them in trays partially filled with water, reduced the light intensity and duration and kept the room at its lowest temperature...64 F. Didn't work and too many mounted plants to move. I came home to dead mounted orchids. I then engineered and constructed a misting system with 1/2" PVC piping and greenhouse misters attached to a 1/8hp sump pump. I submersed this in a 40-gallon trashcan filled with RO water. Drip, drip, drip is what I saw from the misting system. Enough to keep the humidity elevated so that only a few mounted orchids died. Then, must be that 1/8hp was too small, so 1/2hp must be right, Back to Home Depot and \$89 later...a little faster drip, drip, drip; almost a little stream. But you know the scenario; the ones you loved succumbed and the plants you were okay with semi-survived. Until the next 'intermission'. ENOUGH!!



The original PVC and sump pump misting system (notice the die back from the Lycaste) First of all was research. I know there have been foggers in the market for years, but I wanted more of a watering system for the mounted orchids rather than a general increase in humidity in the room. I stopped by a couple of greenhouses that had solved this problem. What I left with was a design using this huge pump with an air storage tank capable of running a pneumatic air wrench and all the car lifts in the neighborhood gas stations. I would have lost 10% of my growing space to fit this into my 20' x 8' grow room. And forget about carrying on a conversation at the other end of the top floor of the house when the pump was on. Must have been 2,000,000 decibels.

Finally, in desperation, I called a greenhouse supply store and explained my problem. Fortunately, the salesman I spoke with grew orchids. I described my growing conditions, and he said he thought he knew what I needed but that their store didn't sell the type of pump I was looking for. Great. But he said that he would try to help. (You get that often when you call a company for help!) Over the course of the next 10 minutes, he researched his ideas on-line and sent me 3 links to potential solutions. These were pumps that increased the line pressure from the house to force water out of the misting nozzles. Think misting systems on the vegetables at the local market or cool misting going into a sporting event in summer. Sounded good, so I did an Amazon thing on one of his suggestions and 2 days later with Prime (more like 5) and \$230 later, I received a package containing not only the pump, but inlet and outlet hoses, inlet filter, 8 misting T's and screw in nozzles. I replaced my 'old' system with the new, using my water storage tank and low and behold, no mist from the nozzles. Then, reading the questions posed by potential buyers, I discovered that you should not use the filter on the inlet. Would have been nice knowing this from the company literature. I disconnected the filter and it kinda worked. Reading the answers to more questions, I discovered that my inlet hose was too long. No problem. Take the hose out of the connection to the pump and shorten it. No can do. I discovered too late that you need a special tool to disconnect the hose from the fitting. If you pull too hard, the plastic fitting breaks. Oh. And did I tell you, I was leaving for vacation in 3 days? Back to Amazon and 2 days later, a new fitting arrived free of charge. Miracles!!! I hooked the system up and test drove it for 5 minutes. It works!! Off to vacation.



Mounted orchids with pump and misting system temporarily installed

Now, since it was put up so willy nilly, when I got back (PLANTS ARE ALIVE), I put the line and nozzles where they would do the most good. Great, but how long do you leave them on for? I have a 15-minute interval mechanical timer (old fart) and found that there was just too much moisture at the roots and they didn't dry before nightfall. So, back to Amazon with a digital outdoor timer that was set for 7 minutes at 6am and 3 minutes at 2pm. That took a while to determine, but it was well worth the effort. Now they are dry by 5pm and lights out at 7pm.

Two days later, the plants were dry when they were supposed to be wet. The pump worked but no water came out of the misters. Being the Mr. Gadget of the Orchid World I immediately called the manufacturing company for help. After 5 days of emailing their suggestions and the results of my 'repairs', it turns out that an air bubble was getting into this self-priming pump at the input fitting. A new fitting came 4 days later from the company free of charge; I like that. I found out you could mock-up the required tool and the replacement was complete Voila, MIST!

JAN 2023



The pump is 8" x 4" x 4"

Now that I knew the system worked, it was time for permanent placement. I temporarily set up the position of the tubing and nozzles and did several tests. Make sure you don't mind getting wet because this thing throws a lot of water out in a short period of time. I've had to reposition the nozzles on a couple of occasions as the placement of the new or remounted orchids on the mounting racks changes. Also, I am discovering placement of the plants based on light requirements. What I did not expect was the amount of water the fans blow around the room. Sure, this increases humidity, but I have had to move other plants in the room based on a dry winter rest (think Catasetums and some Dendrobiums).

The bottom line is that 'This Is a Game Changer' for me. I no longer have to go down to the grow room every day to water the mounted orchids. Now, I go every day to see if I can find any new blooms or pesty things. If I leave for a few days or weeks, I know the mounted plants will do fine. Thank goodness I still have my son who, for the right price, will come down to water plants once a week and check to make sure the water tank is full. But I come home to green, not yellow or brown. Ahhhha.

Now, what can I do to maximize the amount of PAR each plant is receiving......



·THE AOS CORNER·



Greenhouse Chat with Ron McHatton Orchid related questions, answered by AOS experts.

Click Here to watch now.

Note the specific times below if you wish to watch or listen to those topics.

00:32 Thrip damage

4:33 Vanda leaf drop

7:24 Vanda root problems

11:15 Marketing Names (RHS)

17:00 Culture of Miltonia vs. Miltoniopsis

22:30 Angreacum sesquipedale

24:44 Eggshells in potting media

26:59 Physan for disinfecting virus

31:04 Aerial root

34:42 Effect of light levels and Cattleya leaves

37:22 Phalaenopsis leaf problem (yellow spots)

41:26 Repotting (when should you do it)

44:48 Sterilizing tools

46:25 What causes buds to blast (lengthy chat)

52:21 Watering Vanda (dunking in bucket of water)

Seasonal Orchid Care January/February

Click here for Checklist

Organizing orchid culture and its chores by season is a convenient way to make sure that your orchids get the proper care at the right time. Becoming in tune with your plants' growth cycles creates a connection with the natural world and makes you a better grower.

Officers, Directors & Committee Chairs

Officers

President Dina Deresh <u>dinad@massorchid.org</u>
Vice President TBD

Past President

Brandt Moran

Secretary

Brandt Moran

Brandt Moran

Brandt Moran

Brandtm@massorchid.org

brandtm@massorchid.org

brandtm@massorchid.org

amandal@massorchid.org

Directors

Linda Abrams

Mike Badia

Emily Dewsnap

Ralph DiFonzo

Anne Pfaff

Alexis Victor

Mike Badia

mikeb@massorchid.org

emilyd@massorchid.org

ralphd@massorchid.org

annep@massorchid.org

alexisv@massorchid.org

Committee Chairs

Orchid Digest

AOS Trustee Howard Bronstein
AOS Representative Brigitte Fortin <u>aosrep@massorchid.org</u>

Conservation Robert Hesse <u>conservation@massorchid.org</u>

Social Media Emily Dewsnap <u>emilyd@massorchid.org</u>
Technology Ralph DiFonzo <u>ralphd@massorchid.org</u>

Hospitality Committee Karyn Stewart <u>karyns@massorchid.org</u>
Library Open <u>karyns@massorchid.org</u>
<u>librarian@massorchid.org</u>

Membership Ralph DiFonzo ralphd@massorchid.org

Newsletter Editor Anne Pfaff <u>newsletter@massorchid.org</u> Speaker Program

Representative Brigitte Fortin <u>orchiddigestrep@massorchid.org</u>

Orchid Show Ralph DiFonzo

Brigitte Fortin <u>show@massorchid.org</u>

Orchid Show Program Meg Bright-Ryan <u>program@massorchid.org</u>

Show Table

Mike Badia

mike@massorchid.org

Linda Abrams <u>lindaa@massorchid.org</u>