September Meeting - The Orchids of Costa Rica

Thursday, September 28, 2006
7:30 p.m., Franklin Park Conservatory Classrooms
7:30 – 8:00 p.m., Beginners’ Corner

Some of my favorite orchids are from...

Costa Rica. And this month we will all get to hear about them...Our speaker, Jacob Phelps, has been involved with orchids from an early age. As an apprentice to a former illegal orchid collector turned botanical artist in Costa Rica, Jacob learned extensively about orchid identification and ecology, and the significance of regional illegal trade and conservation. He has worked and studied with various botanical institutions including Marie Selby Botanical Gardens, The Orchid Species Preservation Foundation (Canada), Muttart Conservatory (Canada), Lankaster Botanical Gardens (Costa Rica) and Monteverde Jardin de Orquideas (Costa Rica). In 2005, he spent 6 months in Thailand where he was involved with a World Wide Fund for Nature (WWF) project on environmental education and illegal orchid trade. He recently returned from 5 months in the Belizean rainforest working with a rural community on the co-management of a national park.

Sobralia violacea

As our speaker is not bringing sale plants, we will have a member's plant sale table. And of course as always get all the details that won't be in the presentation by joining us at the Old Bag of Nails restaurant at 6pm for dinner with the speaker.

Tennis Maynard
President’s Message

And now back to our regularly scheduled programming. J

We resume our monthly meetings on Thursday, September 28th at the Conservatory. Most of you “got away from it all (organized orchid frenzy)” during August, though some of you attended the Speakers’ Day in Cincinnati and the Fall MAOC in Lexington. Both of those were pleasant and useful experiences.

One of the pleasures of attending away shows is the opportunity they afford to take a few hours (or an extra day) to explore the locale. Historic sites, antique shops, and natural scenery are some of the things that will get me out of the orchid show and sampling the sights. Lexington has a bit of everything. Saturday was pretty hot and humid and my walking tour got me only as far as Mary Todd Lincoln’s childhood home, and a nearby antique shop and tea room. But on Sunday when the show and meetings were winding down, I headed to Shaker Village in Pleasant Hill, Kentucky. This historic preservation was fascinating. Of the several dozen restored buildings on the 1,500 acre (so I was told) site, many have been converted to guest rooms. The restaurant was excellent and the docents, all in period costume, were very forthcoming with information about the Shaker attempt at a utopian community. Two of them performed several (of the 20,000+) songs written by the Shakers, making the restored Meeting Hall reverberate. My only disappointment came Monday on the ride home. I had wanted to stop at the Woodford Distillery for a tour and a late lunch at their restaurant. After miles of back road driving I arrived only to find that the visitor’s center was only open Tuesday through Friday. So mark me down for the next Bluegrass Orchid Society show.

Why the Woodford Distillery? Well, the waitress and bartender at the host hotel’s bar introduced several of us to Woodford Reserve Bourbon. But that’s another story. J The moral, however, is that very good things happen to people who attend away shows and help Naila set up our society’s exhibit. Be part of the fun.

Tom Franczak

Epidendrum radicans

Remember, with the new year came the membership renewal season. Our membership year is January to December. If you have paid your dues already, bless you. If you have not paid your dues as yet, please renew your membership in the Central Ohio Orchid Society TODAY. Please send your check (made payable to “Central Ohio Orchid Society” to our membership chair, J on Young (1752 Marsdale Avenue, Columbus, OH 43223), OR bring your check to the next meeting. Please support the society by renewing as soon as possible. The dues are $15.00 for Individuals and $20.00 per household.
Ye Olde Orchid Glossary

**Aerial Roots** – Roots produced above or out of the substrate or potting mix.

**Alba** - White form of a flower.

**AM** – Award of Merit. Second highest flower quality award given by the American Orchid Society for plants scoring 79.5 – 89.4 award points. An Am can also be bestowed by the Royal Horticultural Society (AM/RHS).

**Angraecoid** - Term used to describe the monopodial orchids that belong to the African Angraecum orchids and their close relatives.

**Anther** - The pollen bearing part of the stamen of the flower.

**AOS** - American Orchid Society

**Apex** - The tip (of a stem or pseudo bulb).

**Apical** - Used to describe the inflorescence when this is produced at the apex of the stem or pseudo bulb.

**Axil** - The angle between the upper side of a leaf or stem.

**Axillary** - Used to describe the inflorescence when this grows from the leaf axil.

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**AWAY SHOW BULLETIN**

Naila Caruso, our Away Show Chair, has begun the fall show season. So far it is mercifully brief. She just returned from Lexington Ky. and the next show within striking distance is in October in Cincinnati. Please keep in mind that she will need plenty of your blooming plants in order to construct exhibits. She will also appreciate any help you can give so please consider volunteering to assist or take a show for her. Remember, this is also an opportunity to have your prized blooms judged.

October 21-22, 2006 Greater Cincinnati Orchid Society Show.

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Psychopsis krameriana

Paph. Coos – P. praestans x P. chamberlainianum
Why don’t I get notified when the newsletter is ready?

A very good question that. The answer is either I don’t have your e-mail address or I have an incorrect e-mail address. I think most folks that aren’t getting a notice are going to the web site to check or have a friend who tells them when the newsletter is posted. If that is satisfactory to those of you who are not getting a notice, I am a happy camper. If it is not, please send me an e-mail telling me that you would like to receive the notice. If you do that, I will have your correct e-mail address and will make sure that you get a timely notice when the newsletter is posted. I have had an increase in the number of bounces (undeliverable e-mail) so some of you have changed addresses. Let me know if you wish to be added to the list again. Now it is up to you. Send those e-cards and letters.

Bill Cavanaugh

| Cattleya Skinner | Oncidium Sharry Baby |

### 2006/2007 COOS Officers - Terms of Office are from January 1, 2006 to December 31, 2007

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<thead>
<tr>
<th>Position</th>
<th>Name</th>
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<tr>
<td>President</td>
<td>Tom Franczak</td>
<td>614-868-5636</td>
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<tr>
<td>1st Vice President</td>
<td>Tennis Maynard</td>
<td>614-252-5710</td>
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<tr>
<td>2nd Vice President</td>
<td>Tom Bell-Games</td>
<td>614-487-1623</td>
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<tr>
<td>3rd Vice President</td>
<td>Naila Caruso</td>
<td>614-868-5861</td>
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<tr>
<td>Secretary</td>
<td>Nancy Heath</td>
<td>614-294-6722</td>
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<tr>
<td>Assistant Secretary</td>
<td>Bill Cavanaugh</td>
<td>614-878-1745</td>
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<tr>
<td>Treasurer</td>
<td>Dawn Mettler</td>
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### COOS Trustees - Terms of Office Expire December 31st of the Year Shown.

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<tr>
<td>Jim Harper</td>
<td>2009</td>
<td>614-965-1921</td>
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<tr>
<td>Screll Jones</td>
<td>2009</td>
<td>614-864-7924</td>
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<tr>
<td>Ken Mettler</td>
<td>2007</td>
<td>740-380-3023</td>
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<tr>
<td>Nancy Wagener</td>
<td>2007</td>
<td>614-276-8890</td>
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<td>Tom Lochner</td>
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It’s Official.

At the MAOC business meeting held in Lexington we announced the date and location of the COOS Spring Show for 2009 which, as you know, is one and the same as the MAOC Spring Show and Meeting for 2009.


Dates for Orchid Judging at the Cincinnati Center: Civic Garden Center of Greater Cincinnati, 2715 Reading Road, Cincinnati. Registration of Plants at 12:00, Judging starts at 1:00. August 13, September 10, October 8, November 12, and December 10, January 8, 2007, February 12, March 12, April 9.

Notes from the August Meeting…Not.

There was no show table at the August meeting because there was no August meeting. The show table rides again in September.

Cattleya and Related Hybrids
Oncidium Alliance
Phaiopedilum Green Leaf

Cattleya dowiana V aurea
Stanhopea costaricensis
Paphiopedilum Mottled Leaf
Phragmipedium
Dendrobium
Phalaenopsis
Other

2006 COOS Calendar

September 28    Jacob Phelps – Orchids of Costa Rica
October 19      Ray Barkalow – Semi-hydroponic growing
November 4-5    Mini-show
November 16     Potluck Dinner

Board Meetings. Board meetings will generally be held the second Tuesday of odd numbered months with the exception of September:

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<td>January 10</td>
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<td>March 14</td>
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It’s Showtime ....

Naila Caruso’s traveling circus and transient orchid show has resumed traveling albeit on a much reduced fall schedule. Naila has just returned from the Fall MAOC at the Bluegrass Orchid Society show in Lexington, Kentucky. COOS was well represented by the generous loan of our members orchids but Naila reports that the competition was most impressive for the season. Below is a listing of plants that ribboned at the show.

Fall MAOC (Lexington, Ky.)

2nd    Paph Magic Lantern            Tom Bell-Games
3rd    Lc Heidi Kirkpatrick (coerulean)  Bill and Ruth Cavanaugh
3rd    Onc. Sharry Baby ‘Sweet Fragrance’  Bill and Ruth Cavanaugh

Many thanks to all those who sent plants.

REGIONAL SHOWS: The following are upcoming shows within a reasonable distance from the central Ohio area:

October 7-8, 2006    Pittsburgh Orchid Festival, Drew Mathieson Center, 1600 Metropolitan St. Pittsburgh, PA. Contact: Nancy Kline, 1118 Bay Hill Dr. Gibsonia, Pa. 15044; (724) 687-9796. pittorchidfest@yahoo.com
A freeway jaunt to Steeler town, no more than three and one half hours barring construction delays. Might even be able to catch a game the same weekend.

October 14-15, 2006  Illinois Orchid Society Show, Chicago Botanic Garden, 1000 Lake Cook Rd. Glencoe, IL. Contact: Lois Cinert, 595 Sharon Way, Bolingbrook, IL. 60440; (630) 739-1068; geolocin@earthlink.net
Just a short trip. All right, it’s a weekend jaunt and a good drive of say, seven and one half hours but you get to see Chicago. Tom might be going, we can follow him.
Editor’s Corner: This month’s contribution to orchid knowledge comes to us from Leo Schordje. Leo has visited us before as a speaker and raises and sells an impressive collection of phrags and other orchids. As many of us have recently purchased new phrags or first phrags for our collections (Glen Decker) I thought it might be appropriate to address Phragmipedium culture. This is a particularly informative article and points you to another equally interesting piece on species phrags. As I could not find the second article on the website link identified in Leo’s article, I reprinted it below his piece. Thank you to Leo for the permission to reprint his article.

Another piece you will find in this months newsletter is Ye Olde Orchid Glossary. This little item will, no doubt, not provide much for the long time grower but the goal here is to meet the needs of as many society members as we can and this is focused on the newer grower, though perhaps many others can benefit. I will benefit as well as I now have at least one item already in the hopper for the next twenty-five (it is an alphabetical list) issues, more if the S and T sections are over large. And so another reminder, if there is a topic you would like to see addressed… or a contribution you would like to make… please let me know.

Also, please remember that the September meeting is a scheduling aberration. We meet on the last Thursday of the month, not the third. It’s an FPC/September thing.

Bill C.

Culture of Phragmipedium Hybrids by Leo Schordje

Phragmipedium Orchids (Phrags for short) are my favorite group of Slipper Orchids. There are some 20 or so species of Phragmipedium, which come from Central and South America. They form a group of Slipper Orchids, distinct from the Asiatic Paphiopedilum (Paphs) and the north temperate Cypripedium (Cyps). I felt the need to write this because the older literature generally makes the mistake of lumping Phrags with Paphs in their discussions of cultural techniques. The Phragmipedium are very different in cultural requirements from the Paphs, and really need to be treated differently. I believe the Phragmipedium hybrids are the easiest group of Slipper Orchids to grow in the home. They grow a lot faster than Paphs and are much more forgiving of less than ideal conditions. Hybrid Phrags have great vigor, and when happy can grow incredibly fast and bloom year round. You can’t ask for an easier group of orchids to grow. Phrag species are not generally difficult to grow, but I want to emphasize that the hybrids are even easier to grow. These culture tips are pointed more at letting you know what you can get away with while also pointing you toward the ideal cultural practices.

Light, Temperature and Air Movement: These three topics are interrelated. One influences the other.

Phragmipedium hybrids will grow at any light level, from the deep shade that ferns like, to the bright light that cacti prefer. They really do best somewhere between bright enough for a Cattleya and bright enough for a Vanda. In other words, half sun to three quarters sun, or 2500 to 7000 foot candles. They really should be thought of as sun loving plants. I have grown and bloomed them in bright shade, but my better blooms have been when I grew them with more light. From actual experience I can say Phrag hybrids will hang on and grow in fairly deep shade, but they will grow much more slowly. In low light new growth will tend to climb more, making repotting more difficult. In low light it may take 2 years or more to mature and bloom a growth and in low light the blooms will be less intensely colored. In bright light it may take less than a year to mature and bloom a growth and the blooms will have more intense color. The point is that you can successfully get away with growing Phrags in low light, but they will perform best in bright light. They do quite well under artificial lights, where longer day length can compensate for lower light intensities. I use 40 watt florescent shop light fixtures with an 18 hour day length all year long. There is no need to change day length with the season, Phrags are not sensitive to photoperiod.

Temperature and Air Movement Air movement and temperature interact with the topic of light in that you can give your plants much more light with good air movement or at cooler temperatures. The air movement cools the leaves and prevents burning, the more air movement you have the more sun the plants can tolerate. With more sun you will have
more frequent blooming and better quality flowers. At 90°F in direct sun and still air leaves will burn to a crisp in minutes. At 90°F in direct sun with good air movement your plant will be fine. On really hot days, over 95°F, especially if there is a chance the breeze may stop due to weather or power failure, it would be best to put the plant in the shade. Phrags are very forgiving of extreme temperatures. They generally are intermediate growers, ideally 55 to 68°F at night and 10 to 25 degrees warmer in the day. They will tolerate nights down into the mid 40's and daytime temperatures into the low 100's. Protect the plants from direct sun during the heat of the day if temperatures are above 95°F. There should be enough air movement at all times that the leaves are moving a little in the breeze. This will be enough to keep the leaves from cooking in the sun. I do know a Vanda grower who raises Phrag. besseae hybrids under his Vanda hybrids. His night temps never drop below 70°F. His coolers do not kick on until 95°F. He has a number of fans going at all times in the greenhouse. He gets good growth and blooming. Because he has good light, the color of his flowers is intense. Phragmipedium hybrids, even P. besseae hybrids do tolerate heat fairly well. It is true that cooler night temperatures will give better red color development in the flowers, but even in warm temperatures you can get good flowers. Air movement also helps dry water off the leaves and the crowns of the plants. This keeps fungi and bacterial diseases down. If the leaves and crowns of your plants are dry in less than 4 hours after watering the risk of fungi, water mold or bacteria getting a rot growing in your plant is greatly reduced. Air movement also keeps the roots healthier by getting air to penetrate into the potting mix. Most growers solve the air movement problem with fans that are usually left on 24 hours, 7 days a week. Windowsill growers might get away with doing nothing about air movement, as the household environment may be airy enough that this may not be a problem. **Trick:** Feel the leaves of your plant when the sun is bright. If the leaves are cool to the touch, you have enough air movement for the place where you are growing your plant. If they are warm to the touch you need more air movement. Also check to see if your leaves are dry within 4 hours of watering your plant. If they are dry, then you have enough air movement. If you need more air movement, a cheap $7 clip on fan or a box fan from your local Lowes or Walmart may do the trick. Generally a cheap fan will last about 18 months, so I keep a stash of several fans stored in the attic, because most stores only stock fans in the summer. As one fan wears out I simply replace it with a new one.

**Windowsill Growing.** This is a little trick for windowsill growing. One of the problems of windowsill growing is that the sun beats directly on the pot the plant is in. Plastic pots in particular heat up in the sun. This can quickly cook your roots. Put the pot inside a larger clay pot that is deeper than the plastic pot the Phrag is growing in. The space between the clay pot and the plastic pot will keep the roots cool. Don't put any potting mix in the air space between the two pots. The air space provides the insulation. Direct sun on a plastic pot can cook the roots in no time. The larger clay pot will shade the roots. If you are standing your Phrags in water, the clay pot will wick up water and provide additional evaporative cooling. If you like, you can use a wicker basket or other Jardinière will also provide the shade. This will keep the roots cool while allowing you to get some sun on the leaves.

**Water Quality.** A lot has been written about water quality, and these discussions often get very complicated very quickly. It is true that in the ideal world Phrags enjoy very pure water. If you are raising the species this can become important. Fortunately Phrag hybrids are very forgiving of water quality. Remember you can to some degree make up for poor water quality by keeping the plants wet. Water quality becomes an issue as you dry a plant out. The wetter you grow the less critical the water quality. The nattering nabobs of orchid punditry will tell you that black leaf tips are a sign that the water you are using is not pure enough, or that you are using too much fertilizer. I will tell you that black leaf tips are a sign you let the plants get too dry between watering. Across the country, most municipal tap water is acceptable for raising hybrids. I would not worry about water quality if your other plants are not showing obvious signs of stress. Anything less than 1000 ppm total dissolved solids can be made to work for the Phrag hybrids. Phragmipedium species come from very wet environments such as the splash zones of waterfalls, stream banks, and the tropical equivalents of wet sedge meadows. The hybrids like to keep their roots moist to wet. In the wild the crown of the plant will be up on a grassy hummock with the roots running down into the water of the nearby stream. Stick your finger into the potting mix up to the first knuckle, if your finger feels dry, you should have watered yesterday. Moist pipe tobacco is about as dry as you would want to let the Phrags get. In warmer weather (night temperatures above 60°F), you may if you like stand the Phrags in a tray of water about an inch deep. Change this water once a week to avoid a salt build up. Even though the Phrag may be standing in water, still water the plant at least once a week. When you water, flush water through the pot, wetting all the media, again this is to avoid any salt build up. This way, even with water that has fairly high dissolved solids, you can keep salts from accumulating. When I was growing on windowsills, I would plunge the plants into a 5 gallon bucket of water up to the pot's rim to water them. This is not an ideal technique because there is a risk of transmitting fungi, bacteria, or possibly virus from one plant to another, but it is something you can get away with in a small collection. I did this for many years until I was able to switch to using a hose to drench my plants.

**Humidity.** Phrags enjoy humidity when they get it. The hybrids will get by at any humidity above 35%. You get better root growth and flower development at 60% to 80% humidity, but you can do a nice enough job at lower humidity.
Potting Media. You can grow Phragmipedium orchids well in just about anything if you understand how to use the media. My recommendation is that you repot the Phrags into the same mix that you use for most of your orchids. That way you will know about how long it will take for the mix to begin to dry under your conditions. My personal favorite mix is a bark mix. I use a seedling size, 1/8 inch, for plants in 5 inch pots and smaller. I use a medium size bark mix for plants in larger pots. The key is to use a mix that holds water well and yet has good porosity for air movement to the roots. My mix is about 4 parts bark, 1 part charcoal, 1 part sponge rock, 1/2 part coarse vermiculite, for a total of 6 1/2 parts. I have also grown Phrags in straight New Zealand Sphagnum moss with excellent results. I believe Phrags will do well in what First Rays Orchids calls semi-hydroponic growing. I have never tried semi-hydro myself, but from what I have heard Phrags are well suited for it. Repot once a year, or sooner if the media breaks down. If the new growth climbs up above the mix, turn the plant on its side a bit as you repot so the base of the new growth is in the media. That way new roots will grow right into the mix. The new growth will straighten out after a while after doing this. The best time to repot is when you see new root buds developing on the base of the new growth, but any time you have time will work. Phrags grow year round and can be repotted at anytime.

Fertilizer. Phragmipedium prefer a dilute fertilizer solution applied fairly often. Use high nitrogen, low phosphorous fertilizer at about 1/4 teaspoon per gallon (about 1000 ppm) every second or third watering, about twice a month more or less. You can fertilize continuously if you drop back to 1/8 (about 500 ppm) teaspoon per gallon every watering. Flush with clear water occasionally. Use the high nitrogen fertilizer year round. Do not switch to a high phosphorous "Blossom Booster" formulation in the fall as many articles in the older literature suggest. The recommendation for use of a high phosphorous "Blossom Booster" fertilizer was based on historical bad science, and may potentially be harmful to your plants. This urban legend actually comes from 1920's British gardening practices and was not really scientifically tested until the last decade or so. So stick to high nitrogen fertilizer, a 30:10:10 or some other approximation will do. The brand of high nitrogen fertilizer is not very important, the plants can't read the labels. Also, don't worry about whether the nitrogen comes from urea or not. The current fad around "Urea Free" fertilizers is another pile of manure, so to speak. In Phrag culture, you are keeping the plants wet. There are plenty of microbes and ample time for the urea to be broken down into the form useful for the Phrags. Another point about brand names is that nitrogen labeled for African Violets or Tomatoes is indistinguishable from nitrogen labeled for Orchids. Read the label and list of ingredients, that is what is important. Do use a fertilizer with trace elements, good ones are made by Peter's, Dynagrow, Sterns, or any other brand labeled as having the trace elements. The Michigan State University formula fertilizer seems to be excellent. The MSU product is a 13:1:3:7:2:2 respectively nitrogen, phosphorous, potassium, calcium, magnesium and sulfur. I realize I was trying to tell you what the minimum is you can get away with, but my initial trials with this fertilizer have been rather good, so I thought I would tell you what I am actually doing, rather than what you can get away with. Several companies make the MSU formula, and they will advertise it as such. One is Green Care, Kankakee, IL. Blackmore is another company. If you see it, give it a try. You can get reasonable results with just about any fertilizer on sale. If you are getting leaf tip burn on newer leaves you are either fertilizing too heavy or running your plants too dry between watering. More often than not, black leaf tips are due to lack of water, rather than excess fertilizer.

Displaying your blooming Phrag. When in bloom and looking beautiful it is best to move the plant to the center of your dining room table, or other place of honor in your home where you can see it and enjoy it. A few days or even weeks away from where you grow it won't hurt it. We grow them to enjoy them. Don't be afraid to move your plant around. Enjoy the fruits of your labors.

These are the basics of culture. Phrags really are easy to grow. A little water, sun and time and you will have flowers. For a different perspective I recommend another culture sheet, written by my friend Marilyn LeDoux. Her sheet will give you more tips on growing species to perfection. I respect her growing skills, she is a magnificent grower and has several cultural awards to her name. Windy Hill Gardens has a good selection of Paphs and Phrags and other orchids for sale. Please visit her website at: http://www.orchidmall.com/windy.hill/index.htm.

Happy Growing,
Leo Schordje

Leo Schordje’s website can be found at http://www.schordje.com.
Phragmipedium Culture
By Marilyn LeDoux, Windy Hill Gardens, Labadie, MO

[Reprinted from Fall 2000 SOA Newsletter]

Phragmipediums are New World ladyslipper orchids that grow from Mexico through central South America. Most are terrestrial (grow in the ground) or lithophytic (grow on rocks), but a few species can sometimes be epiphytic (grow on trees). The tree dwellers are primarily the long-petaled caudatum types. Some species prefer to grow in the splash zone of waterfalls and on streambanks and can often be submerged during periods of heavy rain. These streams and waterfall dwellers include the species caricinum, kaieteurum, klotzschianum, lindleyanum, longifolium, pearcei, and sargentianum. Phrags flower at various times but most heavily in the late winter and spring. Mature plants of many sequential-blooming species can be in bloom for six months or more.

Light. Light needs for Phrags range from bright (cattleya-like, 3,000 to 4,000 footcandles) for the long-petaled caudatum types and xerophyticum, to medium low (Phal-like or mottled leaf Paph-like, 1,500 to 2,000 footcandles) for besseae and schlimii. Growing these lower light Phrags on a lower bench in a greenhouse usually provides both the reduced light levels and somewhat cooler temperatures they prefer.

Temperature: Most Phrags prefer intermediate temperatures with nights in the upper 50's to the mid 60's. However, besseae and schlimii can tolerate and even prefer somewhat cooler temperatures. If kept much cooler in the winter, keep them somewhat drier as well, not soggy wet. Phrag xerophyticum prefers temperature on the warmer end of the ranges given above.

Humidity and air circulation: Grow in humidity above 50 percent if at all possible. Plant groupings on pebble-trays with water between the pebbles is very helpful when growing in the home. Caudatum types are most tolerant of less humidity, as long as the roots remain moist. Constant air circulation, especially in a greenhouse or grow room is very important. In higher humidity growing areas such as these, growths that do not dry out by evening can develop a bacterial rot. Constant air circulation can help prevent this problem. If a problem does occur, pull off the infected leaves and use a bactericide. This problem can occur on any Phrag but is most prevalent on caudatum types and their hybrids.

Water: Good quality water is very important for growing Phragmipediums. Tap water with low dissolved solids is OK, but rain water or reverse osmosis (R.O.) water is usually even better. Flush the media and roots well each time you water. Most Phrags should be kept moist at all times; however, the caudatum types and xerophyticum can become somewhat drier between waterings. Some people have great success growing their moisture-loving Phrags sitting them in saucers of water. To help prevent bacterial rot problems do not water over the tops of the plants on cool, cloudy days if the growths will not dry out by evening.

Fertilizer: In general, Phrags can take more fertilizer than Paphs, but feeding too heavily can cause leaf tip burn. When using rain or R.O. water be sure to use a fertilizer with essential micro-nutrients, such as Dyna-Grow. I prefer using water-soluble or liquid fertilizers at one-fourth to one-half the recommended strength for three or four waterings then flushing thoroughly with clear water every fourth or fifth watering. Less fertilizer and/or a blossom booster (higher phosphorous) fertilizer should be used in the fall and winter.

Repotting and potting media: Repot every one to two years in fresh mix. The best time is usually right after flowering, but Phrags are very tolerant of repotting anytime. I prefer the following basic potting mix for my phrags:
* 9 quarts fine bark (Sequoia).
* 3 quarts perlite or sponge rock.
* 3 quarts fine to extra fine charcoal (#3 or #4)
* 3 quarts fluffed Canadian peat or Pro-Mix HP (or similar peat-based mix).
* 1/2 cup bone meal.

For phrags (excluding xerophyticum) potted in 5-inch and larger pot sizes, I like to add in 1/4 to 1/3 medium sequoia bark. I also often add in 1/4 fluffed rockwool, especially for the more moisture-loving types of phrags.

I never use rockwool in my xerophyticum mix.

For Phrag (Mxipedium) xerophyticum, I add to the above formula:
* 1/4 cup dolomitic lime.
* 1/4 more charcoal for good drainage to any size part of this mix separated out. For example, for two cups of the above mix, I add ½ cup or more of extra fine charcoal.

I also use the above mix, minus the extra charcoal but with the dolomitic lime, for my paphiopedilums. I also like to use styrofoam peanuts in the bottoms of my pots for good drainage.

Happy Growing!
Hospitality

Below is a list of who has signed up and the month they signed for. Coincidentally, the blank spots have no volunteers. You will also notice that two of the blank spots occur in September and October and are highlighted. This means Naila will have to try to cover for those spots if no one volunteers. Quite frankly, she does enough for the society as is. Other folks need to step up. Please call her and let her know if you can help at the September meeting. For future meetings, please see Naila at the next meeting to add your name to the merriment roster.

If you have to cancel try to get a person from the following month to switch or ring Naila to change months.

<table>
<thead>
<tr>
<th>September</th>
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<tr>
<td>Steve Pendleton</td>
<td>Dave Evans</td>
<td>Elly Campbell</td>
<td>Screll Jones</td>
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<td>September</td>
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<td>November</td>
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<td>2007</td>
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If you have already volunteered for one of these dates, bless you and I will list your name as soon as I have it. Just as a reminder.

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THE CENTRAL OHIO ORCHID SOCIETY
c/o BILL CAVANAUGH
4965 OLD TREE AVENUE
COLUMBUS, OH 43228

CENTRAL OHIO ORCHID SOCIETY NEWSLETTER

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