



The Arizona Orchidist

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NEXT OSA MEETING

Meetings are held at the
Encanto Park Clubhouse
2605 N. 15th Ave., Phoenix, Arizona
North of Encanto Blvd., on 15th Ave.
Phone (602) 261-8993

The next regular society meeting will be
Monday, April 4, 2005 at 7:00 p.m.

OSA meetings are open to all
plant enthusiasts

Refreshments will be provided.

This month's beverages by
Joe Bacik
Snacks by

Teddy Cohen and Jim Lauck

Refreshment Coordinators:

Julie Langston (602) 955-5694
Ramona Jungwirth (602) 320-6124

OSABOARD MEETING

The next OSA board meeting
will be held
Sunday, April 24th at 1 P.M.
hosted by

Sharon and Mike Davis
please call
(602) 843-3288

for directions to their home

Board meetings are open to all OSA
members

GROWER ON CALL

Julie Rathbun

(602) 843-0223 Jandfent@aol.com

April Program

Orchid Conservation Project in Sarawak, Borneo

In this presentation **Eric Hansen** will discuss habitat destruction, orchid conservation, CITES, ex-situ propagation and the cooperation of local indigenous people, local commercial orchid nurseries, the Sarawak State Forestry Department and the Sarawak Biodiversity Organization. The lecture is based on the one he presented at the World Orchid Conference in Kuala Lumpur, Malaysia.

Eric Hansen is the author of the internationally acclaimed and best selling book ***Orchid Fever***.

"From the steaming jungles of Borneo and the headwaters of the Orinoco River, to the hallowed hallways of Kew Gardens; from the clandestine orchid nurseries of Europe to the peat bogs of northern Minnesota, here are orchid smugglers, corrupt botanists, moths with 12-inch long tongues, visionary breeder, the aphrodisiac orchid ice cream makers of eastern Turkey, an international network of plant police who raid orchid nurseries with attack dogs and automatic weapons, and a wide range of gentle people whose passion in life is the cultivation of beautiful and fragile flowers.

Eric Hansen spent five years exploring the far corners of the earth—marveling at flowers of uncommon beauty, studying the history of the orchid trade, and grappling with the vicious, bizarre, and petty world of plant politics that sometimes make it impossible to protect endangered species. Hansen brings to life the colorful flowers and the even more colorful people who are attracted to them, as he illuminates a funny, weird and poignant world of horticultural passion and pathos."

Copies of ORCHID FEVER and STRANGER IN THE FOREST will be available for sale, and the author will autograph them.

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Norma Kafer

Aahh, we know that spring is here when we smell the delightful fragrance of the orange blossoms. When I was growing up here, just north of Camelback on Scottsdale Road, there must have been over a half a mile of orange groves. Cars went slower then and Scottsdale Road was only two lanes. You can see the cute little pollinators--bees. Without them, we'd be in real trouble as far as having fruits and vegetables to eat. Even the 40 acre greenhouses in Wilcox that grow tomatoes have bee houses.

Now that the weather is nice, it is perfect time to go out and tidy up the greenhouse and see what is blooming. Might find some surprises too.

We had a good time watching Aaron repotting at the March meeting. Shirley brought a plant as did Joe Bacik. Frankly, I just had too many from which to choose, so didn't bring any. Embarrassed might be a better word.

We have a particularly interesting speaker for the April meeting. Eric Hansen and you might recognize his name from some of the books that he has written. If you can find your copy of "Orchid Fever" he might sign your copy.

We're back at the Encanto Park Clubhouse for April. Remember that we will skip the July 4th meeting. The clubhouse is closed and we thought that the attendance would be down because the smart ones try to get out of town for a few days.

HOPI STUDENTS DISPLAY ARTWORK AT PACIFIC REGION CONVENTION

By Kristin Huisinga
Research Assistant, Hopi Cultural Preservation Office

In 2004, four Hopi students were awarded a scholarship to create artwork for a Hopi Cultural Preservation Office educational project. The artwork of the student interns will be included in a photographic guide to Grand Canyon resources that are significant in Hopi culture. Once the guide is compiled and printed, it will be distributed to villages, schools, and other organizations that wish to learn about information on Hopi culturally significant plants, animals, insects, reptiles, and mammals. (The projected completion date for the photographic guide is the end of 2005.)

Funding for the scholarships was generously provided by the Orchid Society of Arizona. The donation demonstrates that OSA recognizes that art, culture, and science are deeply intertwined in native cultures.

Hopi students have created images of common birds, animals, and plants that are important in Hopi culture. The images will be included in an educational exhibit at the Pacific Region Convention, April 3-5, and at the Arizona Federation of Garden Clubs State Convention on April 6, 2005. Both conventions will be held in the Conference Center, Chaparral Suites Resort, 5001 N. Scottsdale Road, Scottsdale. The theme of the Pacific Region Convention is "Desert Extravaganza".

Thanks to Amy Emary, Co-chair of the Pacific Region Convention, for inviting the Hopi students to display their progress on the Hopi educational handbook. Since there will be representatives from the 8 other states in the Pacific Region, in attendance at the conference, the Hopi handbook will receive additional publicity.

Please join us in celebrating the accomplishments of these young Hopi artists. If you will not be attending the Pacific Region or AFGC Convention, you will still have an opportunity to view the educational display. **The exhibit will be on display at OSA's May 2nd meeting!**

For more information regarding the Hopi Handbook Project, you may phone me at (928) 527-1306 or email me at botany-babe8@hotmail.com

Editor's Note: In an e-mail received on Feb. 18, Kristin reported that about 18 drawings had been completed by the students who received scholarships and that the drawings are "fantastic". She also stated: "It [the handbook] is going to be beautiful. Thank you again for your support."

2005 ORCHID SHOW MEETING

OSA's 2005 Orchid Show and Sale, "A Circus of Orchids" will have its first planning meeting on Sunday, April 24th at the home of **Sharon and Mike Davis**. This meeting will be held at noon just prior to the regularly scheduled meeting of the Board of Directors.

In addition to the members of the Board, show chair **Teddy Cohen** is looking forward to working with the extraordinary talents of **Bob McLeod, Marleny Castillo, Dan Krueger, Julie Rathbun, Christine Franck, Roberta Donahue, Ramona Jungwirth, Harry Parnell, Jim Lauck, Roy Castle** and **David Nunamacher**.

If you have been hiding your talents under a bushel, come to our show planning meeting and let them shine! There is plenty to do for everyone, from great growers to great artists to great plant transporters! What an easy way to help OSA fulfill its charter!

Call Teddy at (928) 476-2220 or email her at taylorbaron@msn.com

Arizona State Veteran Home: We need your monthly donations of soda pop & flavored water. Remember the ASVH residents when you purchase soda pop & water for yourself.

"Volume 4 of *Genera Orchidacearum* is scheduled for publication by Oxford University Press at the end of December 2005. Three years in the making, this volume covers part 1 of subfamily Epidendroideae – 13 tribes (including the enormous Epidendreae) and 210 genera with 35 contributors from Europe and the Americas. Volume 4 will be almost as large in scope as the first three volumes combined.

Among the popular groups treated are Laeliinae, Pleurothallidinae, Coelogyninae, Sobralieae, and Eriinae. For all taxa, 35 contributors from the Americas and Europe provided up-to-date information on nomenclature, derivation of name, description, distribution (with maps), anatomy, palynology, cytogenetics, phytochemistry, phylogenetics, ecology, pollination, uses, and cultivation. Line drawings illustrating virtually all genera appear here either for the first time or are reproduced with the kind permission of institutions or publishers as noted in figure captions. Many photographers have donated some of their best images of species belonging to these 13 tribes."

Alec Pridgeon

FYI: The 2005 OSA Membership Roster will be distributed at our May 2 meeting.

April 22 is Earth Day. 2005 is the 35th anniversary of Earth Day. Take the quiz at <http://www.earthday.net/Footprint/index.asp> and see how well you do.

The *Arizona Orchidist* is published monthly by the Orchid Society of Arizona, Inc.

Direct Inquiries to our website at:

<http://welcome.to/orchidsocietyaz>

Or to any of the Board Officers or Trustees

Board of Directors for 2005

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Norma Kafer nfk54401@cox.net

First Vice President (480) 722-9328
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Second Vice President (480) 785-2251
Joe Bacik bacikj@cox.net
Outside Speaker Program Chairman

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Jennifer Schmitt calligraphybyjennifer@cox.net

Treasurer (480) 947-8479
Wilella Stimmell wilellas@worldnet.att.net

Librarian and Past President (602) 803-6889
Lou Ann Remeikis remeikis@dancris.com

Editor (505) 898-0975
Keith Mead kjkm@comcast.net

Trustees
Teddy Cohen (480) 575-3101
2005 Show Chair TaylorBaron@msn.com
Sharon Davis (602)843-3288
schatzied_az@yahoo.com
Julie Langston (602) 955-5694
Barbara Parnell (480) 948-0714
birdie552002@yahoo.com

The Orchid Society of Arizona, Inc. is a non-profit 501 (C) (3) organization dedicated to community service and the study of orchids. It is affiliated with the American Orchid Society, The Orchid Digest Corporation, the Arizona Federation of Garden Clubs, Inc. The Nature Conservancy.

COMMUNITY SERVICE REPORT

By Wilella Stimmell, CSP Coordinator

After OSA presented school programs on January 12 and 13 in Kingman, we received a letter of thanks from Cerbat Garden Club's Secretary, Sandie Womack. The January programs in Kingman represented the **first time in the 10 years** that OSA has been presenting hands-on repotting programs for schools throughout Arizona, **that an entire AFGC garden club actively assisted us**. Our **ace webmaster, Jim Johnson**, agreed that the letter was special and should be included on our website. Jim has **uploaded the letter onto our Mission Page**. There is a link on our home page to the letter. For benefit of you who do not have access to the internet, the letter is as follows:

"January 19, 2005

To Our Friends at the Orchid Society of Arizona,

We would like to thank you for the impact you made on Kingman on January 12 and 13. Three of your members, Teddy Cohen, Julie Rathbun, and Wilella Stimmell, journeyed to the northern high desert in order to present the program at our monthly meeting and to conduct 'hands-on-orchid-programs' at two elementary schools. All of our members thoroughly enjoyed the 'Orchids 101' program and learned so much. Many of us did not realize that growing orchids was possible in this area and climate.

The school programs were fantastic. We have received thank you letters from teachers at both the Kingman Academy of Learning and Cerbat Elementary School. They were wowed by your generosity. By providing all 170 students their own orchid seedling, the pots, fir bark and plastic canvas for the mini terrariums, you have given them something very unique and special. We are hopeful that they will develop a love of gardening and plants that will carry over into adulthood. We are also grateful for the lessons in science and ecology that were presented to them.

The six members of Cerbat Garden Club who assisted with the school programs as well as the door prize winner send their gratitude to you for the orchids they received. All of us felt very lucky and thankful to have been a part of this event.

We hope there will be future occasions in which we may again join forces as gardeners and stewards of the earth. Your community service and spirit of sharing are awesome and inspiring. Thank you again on behalf of our garden club and all the school children.

Sincerely,
Sandie Womack, Secretary"

Editor's Note: A reporter from the Kingman Daily Miner newspaper attended our programs at Kingman Academy of Learning. She submitted an article about our hands-on programs and a photograph of Teddy Cohen working with students. The article appeared in the newspaper's January 26th edition. Sandie Womack kindly sent us a copy of the article.

For thirty-two years, the artist **Margaret Mee** was enchanted by and lured back again and again to the massive, unpredictable and fertile rainforests of Amazonas. Her initial objective, to search out and illustrate the glorious flora growing in the tree canopies and along the innumerable waterways of the great rivers of the Amazon basin, was later combined with a growing concern at the commercial plunder of the great forests. Her first expedition to Amazonas was in 1956 and it was then that she began to keep diaries along with her paintings, drawings and sketches. Although plant hunting always came first whenever possible and practical, other events often took over. A small dug-out canoe could become a waterlogged, if not dangerous, place to be; rapids had to be got through; recalcitrant boatmen were gently or sternly coerced; drunken prospectors were held off with a revolver. She was fascinated by the rich mix of Brazilians she came across and often lived with for a time; she was especially fond of the riverines she met, and over the years became friends with many of them. Between expeditions, some of which lasted for up to four months, Margaret returned home to Sao Paulo, to teaching commitments, and to her own painting. Unpredictable weather, transport and guides meant she often had to make hurried in situ sketches (always meticulously annotated) which she later worked up into coloured sketches and finished paintings. In the autumn of 1988, just after what was sadly to be her last expedition, Margaret came to England to lecture to the Royal Geographic Society and attend the opening of an exhibition of her paintings, Margaret Mee's Amazon, at the Royal Botanic Gardens, Kew. It is ironic that this enthusiastic lover of the Amazon, who had braved so many hazardous and alarming situations, was killed in a car crash in England. She was seventy-nine, keen to return to the Amazon, and still producing fine work. There is every reason to suppose that more passion and more painting would have been forthcoming. As it is, her legacy is incalculable.

From: Margaret Mees Amazon Flowers: Extraordinary Beauty of the Forests Revealed by an Artist Explorer

The traveling exhibit of Margaret Mee's Paintings will be presented at the **Arizona Sonora Desert Museum Tucson, September 2 through November 26, 2006.**

It is NEVER too early to plan for viewing such a once in a lifetime exhibit....and I will remind you again as the date gets closer.....HEY, why not buy one of our 2006 calendars? This could be your first entry.....ed.

SPECIAL THANKS TO PACIFIC ORCHID EXPOSITION VENDORS

By Wilella Stimmell

To the best of my recollection, in the past 10 years, never at **one** meeting have we had such a large number of assorted, fantastic plants on the silent auction as we had at our March 7 meeting! Two POE vendors who previously supported OSA's community service agenda were again responsible for offering tremendous discounts on plants, and because they told your OSA emissaries (Joe Bacik, Julie Rathbun, and me) to "take whatever we wanted", we did! There were other POE vendors who have previously supported OSA's community service agenda by deeply discounting prices to us, and they were willing to do so again. However, by the time we had purchased plants from two vendors and received a VERY generous donation of plants from a third vendor, we figured that we had probably reached the maximum number of plants that we could pack into our three, very large packing boxes. We were correct! By the time we had packed the last plant and used the last piece of recycled bubble wrap, the recycled boxes were full to the brim! (We think that our boxes qualify for frequent flyer miles.)

OSA is sincerely grateful to the following vendors who continued their support of OSA's community service:

Sheldon and Pearl Takasaki
CARMELA ORCHIDS
P.O. Box 277
Hakalau, Hawaii 96710
Phone: (808) 963-6189
E-mail: carmelaorchids@hawaii.rr.com
Website: <http://www.carmelaorchids.net>

John Oka
KAORU OKA ORCHIDS
1346 Wilhelmina Rise
Honolulu, Hawaii 96816
Phone: (808) 734-0060

Huge thanks is also due OSA member, **DENNIS OLIVAS**, owner of D & D Flowers, 221 Netherby Place, Pleasant Hill, CA 94523, Phone: (925) 969-1246, E-mail: d.olivas@comcast.net As bidders discovered at our March 7 meeting, the plants donated by Dennis were highly desirable, and bidding was fierce on the plants donated by Dennis! This was NOT the first time that Dennis donated plants to OSA! **Thanks Dennis!!** Not all of the plants donated by Dennis were placed on our March silent auction. The remainder will be held for future raffle tables. (The sale of raffle tickets is another source of income for OSA.)

AND **Pearl Takasaki**, of Carmela Orchids, also donated plants to OSA! **Thanks, Pearl!** Unsolicited donations are always greatly appreciated! The plants donated by Pearl will also appear on future raffle tables.

The theme of San Francisco Orchid Society's 53rd annual Pacific Orchid Exposition was "Orchid Reflections". Mirrors were creatively used in a number of displays, but the display that most caught **my** attention was the one that included a cabinet with an orchid design on the exterior. I realize that beauty is in the eye of the beholder, but I can't stop thinking about that cabinet! Dear Santa, PLEASE bring me that orchid cabinet for Christmas. If you do, I will never ask for another "thing"! I HAD the business card of the antique dealer who owned the cabinet, but it seems that the card has fallen into a "black hole" in my house.

And last but NOT least: a gentle reminder to OSA members who benefited from the hard work done on **your** behalf, by Julie Rathbun and Joe Bacik. Please remember to thank Julie and Joe for putting their busy personal lives "on hold" in order to journey to San Francisco, select plants, and wrap and haul them home. Those great plants you now own and that you purchased at BARGAIN prices were the result of a few loyal worker bees who willingly spent THEIR OWN FUNDS for air tickets AND hotel accommodation. Volunteers such as Julie and Joe are the very backbone of a community service-oriented, non-profit organization.

MARCH RAFFLE TABLE DONATIONS



Marleny Castillo, Sharon Davis, Bob MacLeod, David Nunamacher, Wilella Stimmell,
and non members, Ken and Judy Vincent



VERY SPECIAL THANKS TO ALL

Humidity

We often hear of the importance of humidity in the culture of orchids, but that has often raised the questions as to which is more important, relative- or absolute humidity, how do we determine what humidity level we have, and how do we control it

Absolute and Relative Humidity

Absolute humidity is defined as the mass of water held in a certain mass of air.

Relative humidity is defined as the ratio (usually expressed as a percentage) of the mass of water in a given mass of air divided by the maximum mass of water that can be held by that same mass of air at a given temperature. That maximum increases with increasing temperature, which is why for example, we see the RH drop as lights heat a growing area.

One of the functions of the plant's cells is to regulate the flow of moisture into and out of the plant, and they do so in response to the gradient between the inside and outside of the plant. If we take that at face value, one might be inclined to think that the absolute humidity is what's important, as the same number of molecules of water are present no matter what the temperature.

However, as gases such as moist air expand upon heating, warmer air will have fewer water molecules *per volume* than cooler air will, and as our plants do not similarly change volume with temperature, the gradient is shifted to one favoring the loss of moisture from the plant, rather than an uptake of moisture. It is for that reason the relative humidity is the factor of interest in orchid growing. (Before folks take issue with that, let's consider that we tend to grow our orchids in a fairly narrow temperature range, so controlling the relative humidity also constrains the absolute.)

As an aside, it's that physical expansion upon heating that makes warmer air capable of holding more moisture, as there is physically *more room* to fit more molecules in the mix. Upon cooling, the molecules get closer together and have a greater chance of bumping into each other, and when they do, they ultimately condense into droplets, which we see as fog, dew, or rain.

Determination of Humidity

There are several ways to determine the humidity level in your growing area. The simplest is a *reactive* method, in which we simply observe the aerial roots of our plants; if the roots are plump and their tips are green, the humidity is just fine.

Going to the other extreme is the use of a sling psychrometer, in which two thermometers - one dry, the other maintained wet by a wick and reservoir of water - are whirled through the air for a period of time so that the cooling effect of evaporation from the "wet bulb" can be compared to the absolute temperature of the "dry bulb" thermometer. By finding the intersection of those two temperatures on a *psychrometric chart*, one may determine the absolute and relative humidity levels of the air.

For the hobby grower, resorting to such means to measure the humidity seems a bit extreme, and there are a number of devices available that do an adequate job. Just remember that the accuracy may be questionable in less-expensive devices, and if you select a stationary wet-dry bulb thermometer, you're going to need a breeze from your circulation fans to get an accurate reading.

Controlling Humidity

For the orchid grower, we can usually equate "control" with "supplement," as many of our plants come from regions more tropical than our individual geographies.

If you are an outdoor grower, you're pretty much at the whim of nature, but if you do need to add moisture to the air, misting is a good method.

Continued on page 7

Controlling Humidity *Continued from page 6*

In the greenhouse, there are a number of techniques available, such as misting, fogging, or evaporative cooling, and there are a multitude of devices available for that purpose. I use a combination of overhead misting, fogging with an atomizer device, and evaporation from a wet gravel floor after watering to maintain humidity levels around my collection.

For those who grow their orchids indoors, in a controlled environment under lights, many of those same options are available. For the *in-home* grower whose plants are grown in the main living area of the house, the challenge is a bit greater.

Certainly, hand misting of the plants several times a day is good, but just don't leave them wet as night draws closer. Some growers move their plants closer together, so that the localized humidity of the moisture evaporating from the plants and growing medium benefits the entire cluster.

Another good alternative is the use of an evaporator of the type used to ease folks with congestion. A few comments about those: if you select a "cool mist" evaporator - the kind that atomizes the water using a rotating disc - or an ultrasonic type, you may experience the formation of a white film on your plants, furniture, and floor from the minerals in your water. Wipe your plants down periodically with a good leaf cleaner (Rise & Shine works well, and has other benefits), and they'll be fine. The console-type humidifiers that utilize a sponge or moving wick belt to enhance evaporation of the water achieve the same effect without the fear of mineral buildup on your plants and furniture, but it will, instead, build up in the evaporator, requiring periodic cleaning or replacement of the sponge or wick. The same is true of "warm mist" room humidifiers, where the mineral buildup will occur on the heating element.

The use of "humidity trays" is another common recommendation, but one with which I do not concur. With those, waterproof trays containing pebbles are half-filled with water and placed under the plants. The theory being that as the water evaporates, it raises the localized humidity. The reason I do not recommend them is explained below.

A general *caveat* about all of the humidity-enhancing methods described for in-home growing: remember that unless your growing area is sealed off from the rest of your home, any effort to raise the humidity level around your plants is actually trying to raise the humidity of your entire house or apartment! Because of that, especially if there is air circulation due to fans or forced air heating, the less active methods like the humidity trays appear to be of very limited value, if any, and room-type humidifiers might offer only a minimal improvement. If you really want to do this right, consider closing off the growing room, or find a means to humidify your entire home, and remember that for many plants it is not necessary to have tropical humidity, but that we are shooting for a sufficient humidity to keep the plants from desiccating. Maintaining a reasonable humidity in your home has several non-orchid benefits, as well: it keeps your wood furniture from drying and splitting, reduces "nail pops" in drywall, and keeps your skin from drying out. One more thing - and this may be the biggest benefit of all - if you maintain the relative humidity in your home around 50% to 60% during the winter, you will be able to lower your thermostat a bit, as the evaporation of moisture from your skin is reduced, and you *feel* warmer at a lower temperature.

Reprinted with permission of the author, Ray Barkalow, First Rays Orchids.

APRIL IN ARIZONA

April is a playful month,
Some days are hot; some mild.
But this is something we expect,
For spring is yet a child.
But though she's unpredictable,
She'll soon grow up—and then,
We'll pant and sweat—and wish to God,
She was a child again

Clarence S. Lindsten, Orchids in My Greenhouse, Crabgrass in My Lawn

OSA April 2005 Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1  <i>Bob MacLeod</i>	2  <i>August Lorenzini</i>
3	4 OSA MEETING 7:00 PM	5	6	7	8	9  <i>Steve Lamoreaux</i>
10	11	12  <i>Sally Griffith</i>	13	14	15  <i>David Nunamacher</i>	16
17	18	19	20  <i>Lois Sauer</i>	21  <i>Ava Deering</i> <i>Sam Weinschenk</i>	22 <i>Earth Day</i>	23
24 <i>Show Meeting</i> <i>Noon</i> <i>Board Meeting</i> <i>1 PM</i>	25	26	27	28	29	30



Orchid Society of Arizona
 c/o Keith Mead
 5425 Thomas Drive NE
 Albuquerque, NM 87111

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