

# Orchid Society of Santa Barbara

An Affiliate of the American Orchid Society



**Cover photo:** Phil and Angela Watt's Den. Golden Angel from their Best Theme display at the 2009 SBIOS.

Next Meeting:

**Wednesday, June 17, 2009**

Location: Louise Lowry Davis  
Recreation Center  
1232 De La Vina (at Victoria)

Meeting: 7:30 PM

**George Hatfield**  
will speak about  
**Orchids in Holland**

George recently returned from a trip to visit the some of the famed Dutch orchid greenhouses. Their state of the art growing techniques will amaze you, and George will tell us all about them. For the newer members of the society, George is proprietor of Hatfield Orchids in Ventura County, specializing in cymbidiums. George is also an AOS and CSA judge. Come hear what I have been told by reliable sources is a really good overview of Dutch orchid growing.

OSSB Officers for 2009:

President - Randall Umland  
Treasurer - PJ Sanderson

Vice President - Carol Rogers  
Secretary - Heidi Kirkpatrick

Visit the OSSB Web Site!

[www.orchidsb.net](http://www.orchidsb.net)

## Refreshments

	Food	Drink
June	Joyce Tolle	
August	Betty Watt	

Thanks to Angela for May's refreshments. Please sign up for refreshments at future meetings. There are plenty of spaces open on the sign-up sheet!

## Calendar

**June 13, 2009**

**Orchid Society of Southern California Annual Auction**

First Christian Church meeting hall, 221 South Sixth Street,  
Burbank. [www.orchidssc.org/osscc\\_auction.aspx](http://www.orchidssc.org/osscc_auction.aspx)

Admission is free.

**July 10-12, 2009**

**Santa Barbara Orchid Estate International Orchid Fair**

Earl Warren Showground. Free admission, \$5 parking.

[www.orchidfair.com](http://www.orchidfair.com)

**July 10, 2009**

**Santa Barbara Cymbidium Society Special Speaker**

Come hear Orchid Fair guest author Lou Menezes at 7:30 pm  
in Louise Lowry Davis Rec Center.

## Report on the May 2009 Meeting

### Announcements

- President Randall Umland welcomed visitors and invited them to sign the guest book.
- Sign up to bring refreshments! The same volunteers have been filling the list with our snacktime bounty. It is time for the rest of you to step up and volunteer!.

### Program

Vice President Carol Rogers introduced Dr. Daniel Geiger, a researcher at the Santa Barbara Museum of Natural History who specializes in marine snails (e.g., abalone). Dr. Geiger is also an enthusiastic nature photographer. But while his scientific acumen and photographic expertise enhanced the presentation, it was upon neither of these topics that Dr. Geiger addressed the membership. Instead, he spoke on growing orchids in a terrarium.

Dr. Geiger first became aware of a desire to grow orchids upon seeing them growing in a Victorian style greenhouse in San Francisco. But a greenhouse can be quite a commitment, so he looked instead at growing them in a terrarium ... and was told it couldn't be done. With a challenge like that, it was perhaps inevitable that he would learn to grow so successfully that he has written about the topic in *Orchids*, the magazine of our parent organization, the American Orchid Society.

Dr. Geiger does grow native California orchids outside, namely *Epipactis gigantea*. It thrives in a moist spot in his yard, where it has grown from five stems four years ago to many many stems today. He reminded everyone that this is a seasonal orchid that goes dormant in the winter.

Growing in a terrarium is entirely different from growing outdoors, and Dr. Geiger went on quite a journey of discovery in his efforts to learn about the process. He uses a glass aquarium tank and noted immediately that hopeful growers should pick either 24 inch or 48 inch tanks because there are more lighting options at those lengths. He, unfortunately, chose a 36 inch tank, which means he has a more difficult time finding fixtures and bulbs.

Initially, he considered a front-access tank, but the hinge line is visually disturbing and it was more difficult than he expected to get things in and out. Top access has proven more easy to work with. The tank itself is the sort available from fish or reptile supply places.

In positioning plants, growers can choose utilitarian schemes or naturalistic schemes. If growing for utility, a wire rank can be places on the bottom of the tank to raise plants about the level of standing water and avoid root rot. Wire mesh against the sides and back of the tank can support mounted orchids.

Dr. Geiger uses a more naturalistic approach. For drainage, he starts with styrofoam on the bottom and hides it with a topping of orchid bark, with a few stones. Stones are quite naturalistic,

but the larger ones are very heavy and can crack the glass if placed directly onto the glass; styrofoam helps cushion the glass and distribute the weight of any rocks. He has avoided lava rock, even though it is lighter, because it will absorb minerals.

Mounted plants are fixed to larger branches. Through trial and error, he found the most mold resistant wood to be ghost wood from the website [blackjungle.com](http://blackjungle.com). Most reptile supply houses will claim their woods are mold resistant, but they are intended for the dry environments of reptile cages rather than a humid orchid home.

When considering temperature, Dr. Geiger reminded everyone that it is easier to add heat than subtract it. Best to consider the temperatures where your terrarium will be and select your plants accordingly. His tank contains mostly intermediate to warm growers because summer temperatures can get fairly high where he lives.

To heat in the winter, one can use under-tank heating elements, like grow mats or heat pads. He tried heating stones, but found that they break when turned off during the summer; note that these stones are made of a porous concrete and are not meant to get wet. Additionally, placing lights directly atop one's terrarium can provide additional heat.

For cooling on the hottest days, he freezes a two liter bottle of water and puts it in the terrarium in the morning. Additionally, he lifts the lights up so they do not rest directly atop the terrarium's glass cover. He monitors temperature with an indoor/outdoor min/max thermometer, and notes that having an additional humidity measurement on the instrument is very useful. These are commonly available at hardware stores.

For watering, Dr. Geiger experimented with several misting systems and found the Big Apple misting system (available online) to be the most economical and effective. It can have multiple emitters per pump unit, although he finds the misting spray perhaps a little too fine. It comes with a one gallon reservoir but can be used with a bigger reservoir, which enables him to maintain moisture even if he is gone for a few days.

Air circulation in a closed environment is important. Reptile stores sell fans, but he went the do-it-yourself route with a computer fan and attached this to a variable voltage transformer to adjust the strength of the breeze. The fan helps distribute heat and moisture through the terrarium.

For lighting, he recommends high output T5 fluorescent lamps (not T8 or T12). These can be found at aquarium and hydroponic stores. Marine Depot has a good selection, in his experience. He finds that bulbs marketed as "orchid lights" have too low an output. Additionally, the wavelength range of the lights should be around 5000-6000K (not actinic or greater than 9000K, and definitely not a UV lamp). This is closest to normal sunlight. An easy way to tell is to look for lighting that isn't too blue-purple and isn't too red. Something midrange yellow white

is probably good.

Fixtures can be hanging or on feet. While they can rest directly on the top glass cover during cold spells, there should be an air space between the terrarium and the lights during hot summer days.

Dr. Geiger controls his terrarium using timers. He recommends a heavy duty digital timer available from hardware stores, because T5 lights have a high power consumption. In his experience, mechanical ones tend to fail if used continuously. And always use GFI outlets (ground fault interrupt). Electricity and water don't mix!

To populate a terrarium, Dr. Geiger suggests considering several factors. First is size, and consider how big the plant will grow and how big the spike will be! He prefers species and grows intermediate to warm types to match his growing conditions. When deciding if a plant stays or goes, he considers growth and survival, flower periodicity and duration, and special observations or recommendations. Of course, some plants have died. *Amsiella minor* died in about a year. *Scaphosepalum microdactylum*, *Lepanthes calodictyon*, *Dryadella zebrina*, and various *masdevallias* were also touchy, probably preferring a cooler environment.

Successful plants included the following:

*Angraecum distichum* has moderate vegetative growth and flowers regularly through the year. He has had up to 50 flowers in a one to two week duration. The plant does not like direct water spray.

*Bulbophyllum acutebracteatum* likes to be misted daily. It has moderate growth with stolons or runners and has bloomed twice in the two years he has had the plant.

*Ceratocentron fessellii* has very slow growth and makes comparatively large red flowers once a year for about a week. It is sensitive to temperatures over about 90 degrees F, however, and will abort flower buds if stressed.

*Bulbophyllum roxburghii* (*Cirrhopetalum sikkimense*) has moderate growth and makes a spectacular one inch umbel that lasts about a week.

*Dendrobium prenticei* (*Dendrobium lichenastrum*) flowers regularly with one to three flowers that last one to two weeks. It prefers high light, around 1150 foot-candles.

Other species include:

*Den. rigidum*                      *Epi. porpas*  
*Eria amica*                      *Haerella odorata (retrocalla)*  
*Leochilus carinatus (Onc. variegatum)*  
*Ornithocephalus iridifolius x Zygostates alleniana*  
*Platystele ortiziana*  
*Pleurothallis grobyi (Speklinia grobyi)*  
*Pleurothallis brighamii (Speklinia brighamii)*  
*Pleurothallis caespitosa*  
*Pleurothallis tribuloides (Speklinia tribuloides)*  
*Sophronitis cernua*    *Lockhartia limifera*

In watering, Dr. Geiger uses distilled water and sprays for one minute twice a day. He manually fertilizes once a week with Dynagro basic fertilizer. His aquarium has no drain, but excess water is absorbed by the bark and released again as humidity. If humidity is too high, it can be lowered by sliding open the glass top by about a half inch. So far, he has had no real disease problems.

The plants themselves grow well. Plants that he purchases on mounts are attached to the ghost wood. Some have overgrown their mounts and affixed onto the ghost wood. He noted here that he did try black wood, but it began to mold and he tossed it. Some of the potted plants have also outgrown their pots and fixed themselves to their surroundings. Dead flowers are allowed to drop and recycle naturally in the terrarium.

The terrarium sits near a north-facing window, which gives it additional light but no direct sun, which would overheat it. The computer fan has held up well, although he tries to keep it out of direct spray. Since the leads are short, these are connected via banana plugs. The plugs have begun to rust, but he has cleaned them off and they work fine.

## AOS Corner, June 2009

The AOS web site, [www.aos.org](http://www.aos.org), has its own, recently appointed Website committee, with Sandy Svoboda as chair. This committee is working to: "...implement the mission of the AOS by offering educational opportunities, building community through the interactive website and webinars, and offering other committees the opportunity to bring their message to the membership and public. The over-riding goal of the American Orchid Society's Website Committee is to increase member benefits and help in marketing the AOS to new members." The committee was appointed in January 2008. I encourage you to go to the AOS web site and check it out. When you are there be sure to look at the Affiliated Societies Page where we have a FAQ, a list of benefits and our own blog. This is another way the orchid community can get together. The forum is open to everyone, not just AOS members, and please note that you have a separate sign up and password for it. The forum is not in the AOS "Members Only", which has its own password and sign in. The new forum works well and has a special section for Affiliated Societies where you can post your orchid society newsletter and look at other society newsletters. So check it out and let me know what you think about the Affiliated Society section.

Carol Holdren,

Affiliated Society Committee Chair  
[cjholdren@gmail.com](mailto:cjholdren@gmail.com)

## OSSB Newsletter

In the coming months, you may not receive your regular newsletter but instead a one page announcement. Your editor will be occupied by family health issues. *Many many thanks* to **Robin Hamlin** for stepping in to do the mailing. Be sure to let her know if you do not receive your email or US Post newsletter; I have tried to transfer my mailing information to Robin, but I cannot promise that I have been perfectly complete! Kudos to Robin for taking on the part of the job

I consider the most difficult!

If you have ever thought about writing the newsletter, now is the time to step up and volunteer. Remember that it need not be in the same form as this one. I receive many newsletters from fellow editors and they all look different. If you are willing to give it a try, I will worship at your feet (figuratively) and help you all I can. Email me at orchidtrain@cox.net

## Show Table Results

First place in May went to Bryce Augustine's *Paph.* Susan Booth. There were many wonderful plants on the May show table and this showed in the six plants that tied for second. Gene Baum had a dendrobium hybrid. Don Brown tied with a very white *Sarco. hartmanii*. Jeff Thompson received a nod for his *Bulbo. echinolabium*. Larry Vierheilg had three plants that tied for second place: *Pot.* Hwa Yuan Gold, *Paph.* Bel Royal, and *C. lueddemanniana*. Colin Purcell won third and his first show table nod with *C. Undine*. Thanks also to Bill

Robson for bringing plants, although he did not enter any in show table judging.

The judges gave out two Awards of Merit in May. One went to Don Brown's *Cym.* Kuranda 'Chu Ka-wai'. The other was awarded to Cal-Orchid's *Epi.* Pacific Sunsplash 'Gnarly'. Both were awarded 80 points.