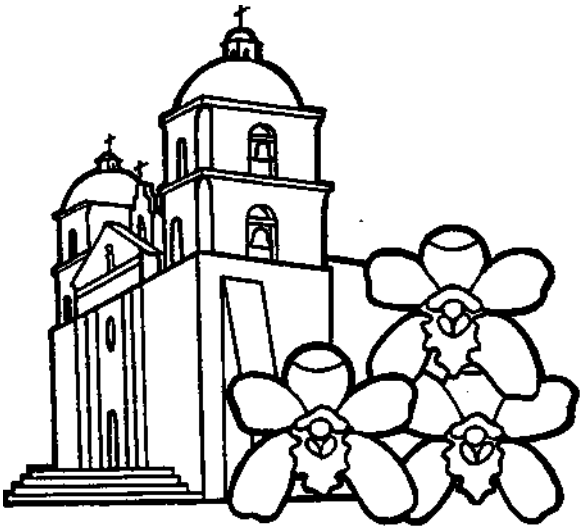

Orchid Society of Santa Barbara

Meeting: Wednesday, May 12, 2004

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

Meeting begins at 7:30 pm

PROGRAM
Hendrik van der Hoven from South Africa
Will speak about
Indigenous South African Orchids

This month's special speaker comes to us from South African, where he is a judge with the South African Orchid Council, President of the Cape Orchid Society, and a professional landscape architect. Hendrik van der Hoven has been involved with orchids since about 1960 and is interested in growing species and photographing orchids in the wild. Come listen to our May speaker tell us (and show us!) some of the beauties that may be found in the South African bush. Hendrik van der Hoven is also bringing a wonderful plant table for our raffle table and a number of delightful African orchid species to sell, so bring your wallets and checkbooks to the meeting!

CALENDAR OF UPCOMING EVENTS

Santa Barbara Cymbidium Society Meeting Wednesday, May 19, 2004
Meeting at 7:30 pm, at Carpinteria Public Library.

OSSB June Meeting Wednesday, June 9, 2004
Another international speaker – David Banks from Australia.

Santa Barbara International Orchid Fair July 9-11, 2004
Earl Warren Showgrounds and SBOE. www.orchidfair.com

OSSB Officers for 2004
President – Phil Watt Vice President – Don Brown Treasurer – Carole Cowan Secretary – Heidi Kirkpatrick

Summary of the April 2004 Meeting

►**President Phil Watt** welcomed visitors and guests, including Takako Wakita.
►**Angela Watt**, who managed the society's sales booth at the spring show, reported gross sales of $4500, giving the society a profit of about $900.
►Congratulations to **Al Svoboda,** president of the Santa Barbara International Orchid Show, Inc., for a great 2004 show.
►**Meryl Wieder** and **Tom Ball** presented Meryl's wonderful revamping of the society website. The society owes a big thank you to Meryl for undertaking this task! Check it out at www.west.net/~orchidsb
►See the announcements section for more on the awards presented to our long-time treasurer Carole Cowan in gratitude for her years of service to the society.

Potting Demonstration

Our own **Don Thorn** performed a potting demonstration using the newly popular Australian diatomite. He has been experimenting with it for over a year and currently is using 50% rock, 40% perlite (sponge rock), and 10% peat. He noted that the peat, contrary to his expectations, sticks to the medium rather than washing out. He prefers diatomite because it absorbs water (granite does not) and does not decompose (like bark).

Of course, orchids will grow in many mixes, as Don demonstrated. He displayed several plants growing in such unusual media as marbles or nuts (as in metal nuts and bolts).

Don stressed the need for steritily when repotting. He cleaned his cutting tools with a propane torch and advocated the use of disposable gloves, one pair per plant.

His means for combating pests involves rubbing alcohol and 409 cleanser. In a one gallon container, he puts one to two pints rubbing alcohol and one pint 409, then fills to one gallon with water. He knows of growers in Ventura who use 100% rubbing alcohol with one teaspoon olive oil as a spreading agent. Don keeps his spray handy to spritz those beasties when he sees them.

Program

Vice President Don Brown introduced the April speaker, our own Sandy Svoboda, with help from her husband, Al. Sandy is a probationary American Orchid Society (AOS) judge, a trustee of the AOS, AOS Chair of Outreach, and a past president of OSSB. Al is chair of the AOS Conservation Committee, President of the Santa Barbara International Orchid Show, and President of the Cymbidium Society of America. Sandy noted that they grow in his and her greenhouses.

This year, Al and Sandy were fortunate enough to attend and judge the 14th Tokyo Dome Show, the largest orchid show in the world. As a comparison, while SBIOS attendance was 12,000, the 2003 Dome Show drew 447,800 people, who paid $18.41 (day), $13.41 (eve), or $9 (night). Some 23 countries exhibit in the show, and the Queen of Orchids (best plant) wins $18,395.85 and a Mercedez-Benz. A total of $150,000 in prize money is distributed.

Plants to be judged are removed from their exhibits and placed on long benches, where they remain for the show. Winners of major awards are placed at the center of the show in the circle of distinction.

Al and Sandy both observed that Japanese judges are very polite, very liberal in their judging, and attracted to large sized flowers. Sandy noted that personal business cards are a must, as they are always exchanged upon introductions.

In addition to familiar plant awards and display awards, the Dome Show has divisions for fragrance, which are judged by members of the Japanese perfume industry. There are also flower design and arts & crafts divisions. Ikebana is important in the show, and wives of foreign ambassadors do table settings with orchids.

Sandy showed a number of slides, including one of this year's Queen, a white Phalaenopsis. Many displays, especially by commercial growers, contained massed orchids of the same color and type – e.g., a ball of white phals or a swathe of yellow dendrobiums. Sandy was particularly interested by the native Japanese orchids on display, including cypripediums and neofinetias. She noted that non-orchid flowers where not forbidden, and some displays used them as fillers or accents.

Sandy finished her slide show with a few photos from a trip to a nursery 1.5 hours from Tokyo. She commented on the superb orchids culture, including very good water and nutritional scientists to manage fertilizer

How An Orchid Species Stays a Species

By Heidi Kirkpatrick

I'll begin this month's editorial with a quotation from Robert Dressler's 1981 treatise on orchid natural history and classification. "Disagreements about … classification … within the [orchid] family are not entirely due to bad taxonomy."

Many of us have scratched our heads at the arcane pronouncements from taxonomists about which plants are species and which are varieties and which are just crummy plants. Worse yet, respectable taxonomists often contradict each other.

I used to figure that taxonomists just liked arguing. Or perhaps they just liked publishing. But now, I've begun to realize that some of the problem may be with the orchid family itself. To quote Dressler again, "The Orchidaceae seem to be a family in a state of active evolution."

What does this mean?

It means that only sometimes do orchid species have distinct characteristics. Nobody would confuse the huge, mahogany-striped, multi-flowered *Paph. rothschildianum* for the bright yellow, single-flowered, round-pouched *Paph. armeniacum.* Even the unblooming plants have very distinct leaves.

Other groups of species are not so easy to separate; these are the groups taxonomists argue about, assigning species or varieties in glorious contradiction to their fellow taxonomists. In fact, Dressler has phrases for these plant groups: variable complexes or hybrid swarms.

What is going on with these variable complexes? Are they two species interbreeding into one? Are they one species evolving into two or more separate species?

This brings me to the next question: How do different species keep from interbreeding in the wild? If they inhabit the same locality, how come they aren't all hybrid swarms? Certainly, the 100,000 plus registered orchid hybrids suggest that many orchid species cross-breed rather enthusiastically.

Dressler discusses several ways an orchid species remains in "reproductive isolation," even while existing in a habitat with other members of the same genus. In fact, reproductive isolation may be considered a key requirement for any species, orchid or not, to maintain its integrity. While the "co-habiting" species A and species B may produce natural hybrids (which may, eventually, become separate species), the majority of the babies must be little A or B for both species to survive.

And just how does this happen?

In nature, orchid species avoid cross pollination through a number of mechanisms. They may flower at different times of the year. A number of cattleya and laelia species are examples of this.

More often, orchids provide floral barriers to discourage (although not necessarily completely eliminate) inappropriate pollinators. Flowers with gullets, like cattleyas or cymbidiums, limit pollinator access by the size of the gullet or throat. Insects that are too small cannot effectively reach the pollinia; oversized insects will not fit inside the gullet.

Length of the spur on some orchids may dictate which insects can do the pollinating. The famous Darwin's orchid, *Angraecum sesquipedale*, with its foot-long spur, would not attract a moth with a proboscis too short to reach the nectar at the bottom of the spur.

Other orchids may attract specific pollinators by color. The white *Pletanthera blephariglottis*, for example, is visited by moths, whereas its orange cousin, *P. ciliaris*, has butterfly pollinators. Birds, too, seem to pollinate according to color.

Many terrestrial European orchids are pollinated by pseudocopulation. Each species mimics the female of a particular species of insect (e.g., wasp). The male is attracted by visual and scent cues to what it thinks is a female, in reality an orchid in disguise.

What does this mean for the variable complex of related species?

Dressler cites a fine example of *Cattleya skinneri* and *C. aurantiaca*, the latter probably hummingbird pollinated and the former probably visited by bees. Despite different pollinators, these species hybridize where their habitats overlap in Mexico and Guatemala to produce *C.* X *guatemalensis.* The hybrid swarm has even been separated out into species by some authors (*C. deckeri*, *C. pachecoi*) – speciation in action! This certainly indicates that one of the pollinators visits both species, at least a small fraction of the time.

I have begun to realize just how important the relationship between orchid and pollinator is. A decrease in the population of the pollinator would force an orchid species to attract another pollinator to survive. A chance mutation in the orchid flower might catch the attention of another, perhaps more efficient pollinator. An orchid at the limit of its pollinator's range might adapt to pollination by another insect or bird, and eventually become a separate species as a result.

And an orchid comfortably in the middle of its habitat, pollinated by its familiar pollinator, would maintain its integrity as a species. These are the easy species for taxonomists to define. The others make orchids exciting for taxonomists and confusing for the rest of us.

Announcements

►*Historical Orchid Prints.* Don Brown received this email from a gallery director in the Washington, DC area. "We are in possession of 48 orchid prints done in 1855 that are very rare and very expensive. However we do not operate a big gallery with large overhead so we offer this prints to our clients at more of a wholesale level. We have worked with the Audubon society (when working with the Audubon prints) and with the Rose society (when working with the Redoute rose prints). Just thought there might be some interest among our members. Please contact me at 1-800-890-4566 or through email. Sincerely, Gary Hutchison, Gallery Director "

►*Upcoming OSSB Meetings/Events.*

- June Meeting – David Banks from Australia, editor of the journal of the Australian Orchid Council (AOC), AOC judge, member Orchid Specialist Group of theWorld Conservation Union.
- July Meeting – the ever popular George Vazquez of Zuma Canyon Orchids.
- August Meeting – Paul Chim, AOS judge and owner of May-on Orchids, on Asian orchids.
- August BBQ
- Fall Show – Museum of Natural History. November 13-14, 2004.

OSSB Thanks its Long-Time Treasurer

Report from the April Meeting. President Phil Watt on behalf of the Orchid Society of Santa Barbara thanked our long-time treasurer, Carole Cowan for her many years of service to the society. Future OSSB Fall Shows will now have a new perpetual trophy: The Carole Cowan Trophy, presented to the genus or category of Carole's choice. Santa Barbara Orchid Estate also honored Carole with an orchid named in her honor and registered through the Royal Horticultural Society. Wayne Ferrell announced the new hybrid Sophrolaelia Carole Cowan, selected for its qualities as an outdoor grower, since Carole grows most of her orchids outdoors. Wayne noted that societies really need to show their appreciation for those volunteers who always come through to help. As your secretary and newsletter editor, I would just like to add that Carole has always been incredibly dependable. I am even more aware of her efforts for the society now that I did this year's roster with Don Brown's help, which Carole used to create on her own; this year, it is a month late and doubtless will need more corrections than usual. So, Carole, on behalf of the society, Thank You!