GREATER LAS VEGAS ORCHID SOCIETY

SUNDAY, JUNE 1, 2003 2pm

THE MEETING WILL BE HELD IN THE USUAL PLACE, THE NEVADA GARDEN CLUB BUILDING, WASHINGTON AND TWIN LAKES, TWO BLOCKS EAST OF VALLEY VIEW.
BUILDING WILL BE OPEN AT 1PM

Carol Siegel, Newsletter Editor

CAROL SIEGEL- PRESIDENT
CLARICE DEAN -VICE-PRESIDENT
EILEEN MCKYTON- SECRETARY
DIANA SMITH- TREASURER

AND...

Dan Mumau, Michael Lawless - Membership Hospitality Chairmen
Lillian Patterson- Photographer and Historian
Dan Mumau and Tony Billitere- Raffle Chairmen
Phyllis Bond, Leslie Doyle,Shelly North and Eileen McKyton- Special Events Chairmen
Jeri Lee and Tony Billitere- Community Liaison
Alex McKyton -Building Chairmen and Webmaster
Tex Severance- Show and Tell Guru
Tex and Gidget Severance- Judging Chairmen
Scotty Nogaim- Election Chairman, Raffle Lady
Liz Leone- Library Chairman Clarice Dean, Assistant Librarian
Clarice Dean- Trip Chairman
John Haydukavitch-Video Chief
Shelly North-Classy Club Apparel Chairlady

June 1, 2003 Nick Burnett "Seven Ways to Kill an Orchid"

July 13, 2003 Virtual Greenhouse Tour
NOTE THIS IS THE SECOND SUNDAY OF JULY
THE FIRST IS JULY 4 WEEKEND

August 3, 2003 Annual Mt. Charleston BBQ

September 7, 2003 Mike Glikbarg, topic to be announced

October 5, 2003 Charles Weckerle-Thrun on "Potting Different Orchid Genera

November 2, 2003	Karen Muir, Brachypaphs
December 7, 2003	Fourth Annual International Food Fest/Holiday Party.
January 4, 2004	John Salventi, Owner of Parkside Orchids, "A Cultural Review of the Genus Dendrobium with Suggestions for New Additions to Your Collection
February 1, 2004	Carol Siegel "The Sex Life of Orchids"
March 7, 2004	Ron Coleman "Wild Orchids of North America"
April 4, 2004	Charles Rowden, "Orchid Photography"
May 2, 2004	Norman Fang, Owner of Norman's Orchids "Phalaenopsis"
June 6, 2004	Glen Decker, Owner Piping Rock Orchids, "Phragmipedium"
July11 , 2004	Virtual Greenhouse Tour SECOND SUNDAY
August 1, 2004	Barbecue
Sept 12, 2004	Mike Blitz, Exotic Orchids of Maui SECOND SUNDAY
October 3,2004	Aaron Hicks, "The Orchid Seed Bank"
November 7, 2004	The Further Exploits of Bill Bergstrom in Mexico
December 5, 2004	Fifth International Food Fest and Holiday Party

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Next month, we will be treated to a slide lecture by Nick Burnett entitled "(At Least) Seven Ways to Kill an Orchid". In his own words,

"The talk discusses, in a relatively light-hearted manner, some of the mistakes that both novice and experienced growers tend to make in raising orchids. I also, at the end of the talk, recommend some hearty survivors that I have failed to kill despite repeated attempts." (We intend to teach Nick some of the ways to kill orchids that WE have discovered that he may not have thought of!)

Nick Burnett is a Professor of Communication Studies at California State University, Sacramento where he teaches freedom of speech, television criticism and presentational speaking. His real passion, however, is growing (and killing) orchids! He is a certified judge with the American Orchid Society and a past President of the Sacramento Orchid Society. He has grown on a window sill, an indoor light rack, and his backyard greenhouse. He attempts to grow paphiopedilums, phragmipediums, and bulbophyllums and has had great success with ants, mealy bugs and scale!

We thank Scotty Nogaim, Liz Leone, June Cravenn, and Gail Harris in advance for volunteering to provide snacks and drinks for the meeting. THE T-SHIRTS WILL BE IN!! Shelly North assures us that ALL our silk-screened shirts, totes, and aprons will be in (yay!!! For Shelly…), and Clarice Dean will present our "Species of the Month". Nick Burnett and Daniel Vong will provide the raffle table and plants for sale. Dan Mumau and Mike Lawless will present a little talk on their trip to see the orchids of Costa Rica, and Dan Vong will tell us a little about flasks. It's going to be fun!!

Amid merriment and Mexican singing, our club gathered in May as thousands in Lorenzi Park celebrated (once again!) Cinco de Mayo outside our window. Diana and I got there early so everyone had "valet parking". Harry Phillips, accompanied by maracas and mariachi, entertained us with a very useful talk on mounting orchids. He sold wonderful species "on a stick" and taught us the tricks of growing out of the pot. As he says, you never see any pots in the jungle! He stressed watering mounted orchids thoroughly and often—none of this spritzing business for him.

We were glad to see Scotty Nogaim back at the meeting selling raffle tickets. We missed her sweet self. We especially missed Leslie Doyle and hope her mother is feeling better now after her surgery. We love them both. We missed Eileen and Alex McKyton and hope their vacation was fun. We extend warm wishes to Gidget Severance and hope her mother has a speedy recovery. We welcomed new members Mary Lepler and Claudia O'Connell and guests Bob and Marcia Boehm, Kate Allen, and Roy LeGarrette. We are pleased to have you in our group.

Gary Nelson, Tessa Khanh, Grace Takahashi, and Karen Good made fabulous food for the club, and Tex our Guru enlightened us about the dozens of show and tell plants that members had bloomed. So many people brought plants that I can't remember them all—but I do remember the beauties brought in by Scotty Nogaim, Jean Gordon, and Jeannie Salles. If I forgot you, I am getting old. It is truly exciting to see the success that members are having who used to complain about their "mules" which wouldn't bloom. Hang in there!! Orchids are like women. You have to gain their trust before they will perform. We thank Daniel Vong and Mike Levin for selling plants to us, and Dan Mumau and Mike Lawless for picking up hotel plants for the raffle. Thanks to me, too, for picking up phals from Simply Hawaii for the raffle.

Clarice Dean discussed the conservation projects initiated by our club. In an attempt to promote appreciation of orchid species, every month we will have a "Species of the Month". You remember that by "species" we mean the orchid as it occurred in the wild before the nursery people started fooling with it. April's beauty was *Dendrobium unicum*, an orange miniature from Thailand with a terrific color, shape and intense peach fragrance. Harry mounted one plant for us and sold us several more. Clarice prepared hand-outs on recognizing species by the name on the plant label and on the culture of *Dendrobium unicum*. Didn't get a hand-out from Harry or Clarice? Call me or get one at the June meeting. We have more!! You should also have gotten a membership roster with the last newsletter. If you didn't, get one at the June meeting.

Clarice has also organized an "Orchid Mating Club" (how very Las Vegas...). She assures us that participation assures complete confidentiality (hilarious...) If you would like to participate, just list your species on the sheet she distributed, I have included one with this newsletter. If you need more, you can get them at the meeting, copy the one you have, or just write your species on a piece of paper. That will work, too. When your species is in bloom, tell Clarice, and she will try to match you up with another member's same species in bloom. We will even have the "wedding" at the club and give you a reception. At our April meeting, Harry Phillips mated my *Coelogyne mooreana* with Diana Smith's plant. Our *Cattleya schroederae* that we crossed in March has a big seed pod now. Around December, we will probably have seed to donate to the Orchid Seed Bank as part of our conservation efforts.

Speaking of conservation, I am working on an article on the native orchids of Nevada for the July newsletter. So far, I have identified SIXTEEN native orchids in Nevada. As part of that effort, Clarice Dean and I went to the UNLV Herbarium and spoke with Wes Niles, the curator. The herbarium is in the Biology Building at White Hall. It was established in 1970 to assist biologists doing research into the floras of Nevada and the Mojave Desert. It has 50,000 dried, pressed plants with collection data for these specimens. Professor Niles spent over an hour with us talking about the collection and the orchids of our desert. VERY EXCITING!! We feel that if we can catalogue our native orchids, we can assist in the conservation of

these orchids. At the very least, our club will be VERY SMART about our native orchids which is GOOD. I have had e-mails with over a dozen of the top people in native orchids, and it is amazing how helpful others are. One of them, Ron Coleman, author of four books on native orchids, has agreed to speak to us in March of 2004 on the native orchids of the United States. He is VERY famous, and I am thrilled that he is willing to come. (By the way, take a look at the schedule for 2004. It is full!! Mike Levin, our illustrious past president, was impressed with the quality of our speaker line-up.)

Diana Smith, a talented third-grade teacher, is developing an educational project for the schools to teach about orchids. Soon, we will need all the members to help carry this out.

Are you going out of town this summer and going to be needing an **orchid babysitter** to care for and water your plants? May I enthusiastically recommend **Jane Green**, our dear member, who has started a business caring for pets and plants. She is a very sweet lady with a good heart (and reasonable prices...) She will be taking care of my hundreds of orchids this summer when I travel. Her number is 255-3648.

Don't forget that July 13 (second Sunday of month!!!) will be our Annual Virtual Greenhouse Tour presenting the greenhouses, growing areas, bathrooms?, and the like where we manage to coax our orchids to bloom (or at least LIVE...) here in the desert. New members and old will learn a lot. 35 mm slides by, hopefully, the June meeting. If you can't take them yourself, Lillian Patterson, our Master Photographer and Nice Lady, will take them for you!! You can call her during the day from 8-4:30 at her work at UMC 383-2417 or at home at 876-7700. Remember that slides often take two weeks to develop so you need to do it now. So far, I have slides from **Marilyn Worthington, Carol Siegel, and Mike Levin. Clarice Dean** tells me she has taken them and **Lillian Patterson** took the slides for **Steven Ninemire and Phyllis Bond**. We are looking forward to getting the slides from **Shelly North, Leslie Doyle, Eileen McKyton, Daniel Vong, Liz Leone, and Gary Nelson**. Each grower will present his own area. I will put together all the slides for you. Do it! It's fun.

In August, we will be having our annual barbecue. Eldine Stevens has graciously agreed to host it in her beautiful home in COOL Mt. Charleston, and Dan Mumau and Mike Lawless, professional caterers and owners of A Catered Affair, will provide the barbecue. It will be a potluck and all the members will bring a dish. There will be no formal program, but we will have a raffle and sale plants. Dennis Dean will do a little presentation on staking plants, and a representative from US Filter will talk on de-ionized water.

Following the newsletter is an article on mounting orchids from the February 1999 issue of ORCHIDS magazine reprinted with permission of the author, Greg Allikas. He has put together a CD-ROM on potting http://www.orchidworks.com/potting/ which is reviewed in the May issue of **Orchids**.

I also thank Gidget Severance for sending me a fascinating article from the May 6, 2003 *New York Times* which details new research into the DNA of orchids. The latest thing in botany is molecular biology which looks into the DNA and sees relationships among plants. Plants are named by genus and species and grouped into families that end in "ceae" like "orchidaceae". The families are then grouped into orders like "Asparagales" or Liliales" or "Orchidales" Orchids are grouped in the order of Orchidales but DNA research has changed all that. Now it seems to fit squarely in Asparagales, an order that includes asparagus, onion, garlic, agave and and daffodils.I called Ken Cameron of the NY Botanical Gardens, and he said that too much emphasis has been placed in the article on the fact that an orchid is an asparagus (which isn't so—it is just in the same order), but there is terrific information in this article which I thought you would enjoy. The article is reprinted with permission of the NY Times. In addition, I have included several questions and answers reprinted with permission from the best place to buy very special orchids on the web- www.orchidweb.com. Try and buy!!

See you June 1. Keep blooming! Love, carol 254-4168 growlove@att.net

Orchid Mating Club

Genus

species

var.

'Cultivar'

Member Information

Name

Address

Phone number

Email

The Orchid Mating Club of the Greater Las Vegas Orchid Society is being established to promote orchid conservation by encouraging orchid species seed production. Please complete this form if you have an orchid species that you wish to cross. We will collect data and attempt to find a mate for your orchid. If a match is found each member will be contacted and the information made available so a cross can be attempted.

Once you have seed pods we encourage you to donate your orchid seeds to the Orchid Seed Bank Project or the Meyers Conservatory. Please check out the web pages for each of these organizations for more information on how to make contributions. Both are non-profit organizations working to provide species seed available to as many people as possible. This may be a small way to encourage greater genetic diversity in species orchids and at the same time discouraging the taking of wild orchids from their natural habitats. We can make a difference!

The Orchid Seed Bank (http://members.cox.net/ahicks51/osp/index.html)
Meyers Conservatory (http://troymeyers.com)

Return completed form to: Clarice Dean

May 6, 2003, Tuesday

SCIENCE DESK

An Orchid by Any Other Name: An Asparagus?

By CAROL KAESUK YOON (NYT) 809 words

Orchids can be elegant, gaudy, lurid and even downright bizarre. But while the unusual flowers of these species have excited plant lovers for centuries, they have also made it difficult for evolutionary biologists to place them in the plant family tree and identify their closest relatives.

But now, scientists say, studies of the DNA of orchids are revealing a host of surprises, chief among them, that orchids are actually part of the asparagus group, closer kin to these vegetables than to the other, flashier, flowering plants they had been placed with before.

"They're so weird, so different from everything else," said Dr. Ken Cameron, orchidologist at the New York Botanical Garden in the Bronx.

At the same time, scientists are finding that orchids, long thought to be the recent product of plant evolution, are actually quite ancient, having emerged more than 90 million years ago.

It is often easy for experts to pick out an organism's closest relatives, but sometimes -- as with orchids -- appearances can point in many directions and no direction at all.

One problem is that orchid flowers have undergone striking evolutionary elaborations, evolving myriad forms and devices, sometimes to entice very particular animal pollinators. In the process, elements of flower structure that may have pointed to the group's evolutionary history have been distorted or lost.

One particular oddity of orchid flowers is their highly unusual reproductive structure, the normally separate array of reproductive parts having evolved to be fused together inside a typical orchid bloom.

"You look inside an orchid, and say, 'Where are all the parts?' " said Dr. Cameron. "It doesn't look like anything else."

By looking at DNA, researchers were able to free themselves from limits of vision. Comparing

instead a wide variety of genes both among the orchids and between orchids and the other flowering plants, Dr. Cameron and colleagues found that the orchids fell squarely within the so-called Asparagales, the group that includes asparagus.

"People found it hard to believe," Dr. Cameron said. But the Asparagales is large and diverse, containing amaryllis, onions, irises, daffodils as well as agaves and yuccas.

Scientists say the evolutionary history of orchids has also been obscured by the oddities of their pollen. While the pollen of most plants is nearly indestructible, the pollen of orchids is typically extremely delicate, leaving no fossil record.

"With other groups you can find a fossil and conclude that the group must be at least that old or older," said Dr. Mark Whitten, a botanist at the Florida Museum of Natural History. "But with orchids it's been pretty much sheer speculation."

Now, when DNA data are used to build an evolutionary tree of the plants, they show that orchids branch off fairly early, the first among the Asparagales plants, meaning they are the oldest in that group.

Orchids also branch off before the palms. Because there are palm fossils that are 90 million years old, scientists know, orchids must be at least that old. The same evolutionary trees also showed that orchids first lived on the ground, and later evolved to live on other plants, as most orchids do, suggesting that life in the trees, a less exploited habitat, might have helped orchids diversify into so many species.

But while DNA has provided these answers, Dr. Cameron said, researchers may have had clues to the history of the orchids if they had not focused so much on the showy and high profile orchid species.

One curious aspect of the Asparagales is that their seeds are encased by a distinctive black, crusty coat.

Because most orchids have very thin seed coats, the Asparagales seemed unlikely to be close relatives. Yet Dr. Cameron has found that some of the more obscure orchids have exactly the Asparagales sort of seed. He noted that Neuwiedia, an unusual Bornean orchid, lady-slipper orchids and vanilla orchids, which produce the vanilla used in cooking, also have these seeds.

In fact, Dr. Cameron points out that the tiny black specks seen in some vanilla ice creams, are, in fact, those crusty black-coated seeds that show the clear alliance of the orchids with asparagus, meaning that the answer to a longstanding scientific puzzle has long been right on the tip of people's tongues.

How to Mount Orchids

By Greg Allikas

In nature, epiphytic orchids grow "mounted" on the limb of a tree or attached to rocks. Their roots are fully exposed to the air, or partially covered by moss, lichen and detritus. We only grow orchids in pots as a matter of convenience; it is easier to provide sufficient moisture and potted plants are far easier to display than mounted ones. There are, however, certain orchids that prefer growing on a mount, some will actually perish in a pot. When determining whether or not to mount an orchid, there are two criteria we should look at; the moisture requirements of the plant and its physical characteristics. Twig epiphytes such as equitant Oncidiums need to dry out immediately after being watered. There are orchids that grow in near xerophytic conditions for all or part of the year such as C. nobilior and Bark. skinneri. Cooler growing orchids can sometimes be successfully grown in warm areas if their roots are exposed. Because of cultural requirements, these orchids would all be good candidates for growing on a mount. Orchids with long rhizomes like Bulbophyllums can be near impossible to keep in a pot. Pendant orchids such as Seidenfadenia, Scuticaria and numerous Dendrobiums are awkward in a pot. The creeping, mat-like growth of some Epidendrums, Dendrobiums and Maxillarias is not at all suited to pot culture. Because of their physical nature, it would be better to grow these orchids on a mount. Obviously, the first place to look for information as to whether or not to mount a certain orchid is the person who you got the plant from. Keep in mind that nearly any epiphytic orchid will grow on a mount provided that you can meet its moisture requirements.

The best time to mount an orchid is when the root tips are just beginning to show at the base of a new lead. If the roots are too long it can be difficult to get the plant seated properly without breaking them. If there are no root tips at all, the plant may be reluctant toward getting established. We like to place newly imported plants and divisions in an empty clay pot in a shady spot of our growing area until they break growth. The gentle cool humidity of evaporating moisture from the clay pot seems to encourage growth to start. Preparing an orchid for mount culture is much the same as preparing an orchid for repotting. Cut away any dead roots or pseudobulbs and do a general clean-up and inspection of the plant. Scrubbing away old sheaths with a toothbrush and some rubbing alcohol is a good opportunity to be sure

that the plant is pest and disease free. Be careful not to damage any new leads or root tips.

Almost any material that does not deteriorate rapidly or contain noxious substances may be used as a substrate for growing orchids. I have seen people growing Cattleyas on slabs of styrofoam and cedar shingles. The most commonly used commercial orchid materials are cork slabs, cypress slabs, and tree fern slabs and totems. The cork slabs stay the driest and the tree fern materials retain the most moisture with cypress being in the middle. Use these characteristics to meet the requirements of the orchid you will be mounting. Branches of locally available hardwood trees are also frequently used for growing orchids. Here in the south, Florida buttonwood has always been popular and will outlast most other materials. Driftwood may be used as long as it is not saturated with any toxic salts. Soaking and then rinsing with copious fresh water can remove any dangerous accumulations of these salts but proceed with caution. Sometimes the unknown nature of a piece of driftwood will harbor a resinous wood that orchids just refuse to attach their roots to. An orchid will usually tell you whether or not it likes the substrate you have mounted it on. If the root tips consistently close up as soon as they reach the mount surface and refuse to attach themselves, better try another material. Asking other growers in your area what materials they have been successful with will usually produce a list of winners. Although cork slabs will last nearly indefinitely tree fern slabs will eventually break down. When they do start to deteriorate you can simply wire them to a new piece of tree fern or cork bark.

Mounting orchids is as much ingenuity and engineering than following specific techniques. Each orchid presents its own special challenges. Our objective is to attach the plant securely enough to the substrate until the roots can take over the job of holding it in place. Any method you can use to achieve this goal is acceptable so long as it does not injure the orchid. Using an inconspicuous method will help create an attractive mount. Fastening materials can always be removed after the plant has established itself but most of us leave them in place, especially if they are not too obvious. Inventiveness and ingenuity go a long way when mounting orchids. Typically we will use galvanized wire, twist tie material or monofilament fishing line to attach an orchid to a mount, but saws, electric drills, ice picks, hot glue guns

and panty hose all have their place in an orchid mounting toolbox. Although every plant is unique, the basic steps of mounting an orchid are the same:

- Prepare the plant as you would prepare any orchid for repotting; cut away dead roots, leaves and pseudobulbs. Inspect and treat the plant for any pest or disease problems. Ideally, root tips should just be showing at the base of the new lead.
- Select a mount to attach the orchid to. Cut the mount to an appropriate size for the plant if necessary and attach a wire hanger.
- Examine the orchid and its relationship to the mount and test fit. Cork slabs have crevasses that can offer more secure mounting opportunities. Branches of hardwood trees may have stubs that will allow you to anchor the orchid more securely. Tie leaves and pseudobulbs together if needed to make a more compact plant.
- Using an appropriate attachment method, secure the orchid to the mount. Use a pad of osmunda or sphagnum to provide additional moisture if desired.
- Attach a nametag and you're done.

Frequently misting a recently mounted orchid will help keep it from desiccating until it produces ample roots to sustain itself. Mounted orchids in general will require more water than potted orchids, sometimes daily during warm, dry conditions. It is probably a good idea to keep all of your mounted orchids together to make watering them easier.

If you grow more than a few orchids of varied genera you will eventually have an orchid that will prefer being mounted. Mounting skills are as much a part of growing orchids as are an understanding of water, light and temperature.

- An electric drill is often the most convenient way to make a hole for a hanger but sometimes an ice pick will work. Be careful ! Use 10 or 12 gauge wire (the gauges used for rhizome

clips and pot hangers) to fashion an "s" shaped hanger and insert at the top of the mount.

- When using tree fern slabs orient the "grain" of the tree fern to a vertical position so that water freely drains downward.
- In general, most sympodial orchids will be placed at or near the bottom of the mount so they may follow the light and grow upwards. Exceptions will be orchids with pendant, lax or mat-like growth habit. These may be placed near the center of the mount.
- 16 or 18 gauge galvanized wire (the gauges used for basket hangers) provides a secure attachment and is useful for large unwieldy orchids. A hot glue gun is fast and particularly suited to small to medium size orchids. When using hot glue apply the glue to the mount rather than the plant itself to avoid possibly damaging any tender plant tissue.
- If your watering habits are sporadic you can use a pad of osmunda or sphagnum at the base of the mounted orchid to provide additional moisture until the plant becomes established.
- Use torn strips of panty hose to attach delicate orchids to a mount or an orchid plus sphagnum. Remove after the plant has rooted to the mount.

Greg Allikas is the awards photographer for the West Palm Beach judging Center. He is also proprietor of the popular Orchid Photo Page on the www and will have information about upcoming potting how-to information at www.orchidworks.com

FREQUENTLY ASKED QUESTIONS
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My plant has dropped some leaves. It is ok?

Almost all orchids drop leaves as they grow. Phalaenopsis plants bottom leaves will turn yellow and fall off when it starts to produce new growth. Common white and purple Dendrobiums often drop all their leaves on each cane after they have finished blooming. With most orchids, old leaf growth naturally drops once new growth starts to emerge. The only time you should be concerned about leaves dropping is when the new growth or large and mature leaves turn yellow or fall off This usually indicates a bacteria or fungus problem. Unless you have a deciduous orchid that has resting periods where it may drop all of its leaves, if an orchid has no leaves it is most likely dead. Examine the plant carefully if the largest leaves or new growth are changing colors.

I've got black spots on my leaves.What could this be?

This is generally a leaf rot caused by types of fungi that are commonly classified as Cercospora or Colletotrichum. Many times this rot will start out as yellow spots, gradually turning to a brown or black color. Note that certain plants such as most Oncidium hybrids often get several small black spots on the leaves due to the sun. In this case it is natural spotting and will not harm the plant.

The best kind of treatment for this problem is to use a bactericide/fungicide spray such as Phyton 27. After treatment, examine to see if the spots are increasing in size or number within a week to 10 days. If you have successfully rid of the problem, the spots should dry up and turn brown. If there are still signs of new rot, repeat treatment. Leaves that are heavily covered in rot should be completely removed. Make sure you sterilize whatever tool you may use to remove the infected leaves with as it can spread the disease to other plants.