

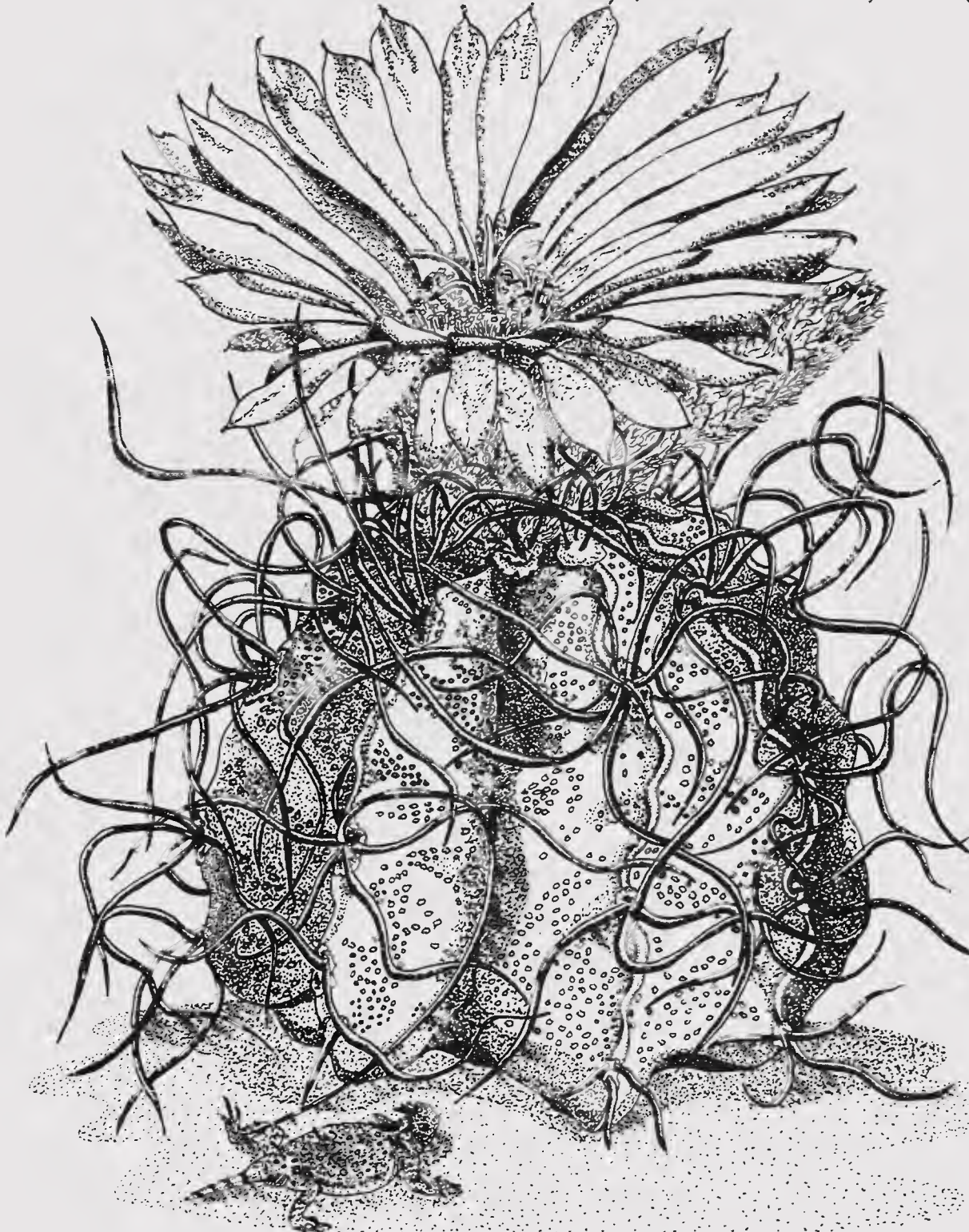
ESPINAS Y FLORES

MAMMILLARIA THORNERI

NEWSLETTER of the SAN DIEGO CACTUS & SUCCULENT SOCIETY, INC.

A Non-Profit Public Benefit California Corporation

VOLUME XXXIII NUMBER ELEVEN SATURDAY, NOVEMBER 14, 1998 @ 1:00PM



Phrynosoma modestum

Astrophytum capricorn
C. MINNICH
1978

AN EL NIÑO SPRING IN CHILE WITH WOODY MINNICH

November's slide show program is sure to be a real winner. Featuring the fine photography of Woody Minnich we will get a cactophile's tour of South America. Woody has traveled there twice in the past two years — most recently last December along with SDC&SS member Tom Knapik. This is sure to be a great program. Don't miss it!

We came across an article regarding the cacti of Chile and Peru by Woody in the July 1998 issue of *Communique*, the newsletter of the San Gabriel Valley Cactus & Succulent Society, and decided that it would serve as the perfect companion to Woody's program.. Read Woody's article in this issue, and you will have a head start on knowing something about all the marvelous cacti he observed and photographed in their natural habitat.

Our cover: This lovely pen and ink rendering of *Astrophytum capricorne* (and *Phrynosoma modestum*, the horned lizard) by Connie Minnich in 1978. We copied it from the cover of the Cactus & Succulent Journal (U.S.) Volume L, November - December 1978.

Please send your letters, artwork, poetry, Cactus or Succulent-of-the-Month articles, puzzles, comments, or criticisms, etc. to:

MICHAEL & JOYCE BUCKNER, EDITORS
2327 "N" AVENUE, NATIONAL CITY, CA 91950
NEW PHONE /FAX NUMBER:
(619) 477-4779

Publication deadline for the December issue is Saturday, November 14, 1998

Espinas y Flores, the newsletter of the San Diego Cactus and Succulent Society, Incorporated, P. O. Box 33181, San Diego, CA 92163-3181, is published monthly with the exception of a combined May-June issue (*11 issues per year*). Newsletter circulation is approximately 400 with about 375 issues going to members (*one issue per household*) and an additional 20-30 issues going to educational institutions, botanical societies, cactus & succulent nurseries, local publications, related natural history events & exhibits, and other interested groups or individuals upon request. Subscriptions (*membership dues for an individual*) are \$10 per year for bulk mail within the USA.

Opinions stated in the articles and editorials of *Espinas y Flores* are solely the opinions of the authors or editors and do not necessarily represent the opinions of other SDC&SS members, the Board of Directors, or the organization in general. All materials submitted to *Espinas y Flores* for possible publication may be edited for form and content. All material in the *Espinas y Flores* may be reprinted by non-profit organizations (**unless such permission is expressly denied in a note accompanying the material**) provided that proper credit is given to the SDC&SS *Espinas y Flores* and the author, and one copy of the publication containing the reprinted material be sent to the editors. Reproduction in whole or part by any other organization or publication without the permission of the editors is prohibited.

ATTENTION ALL MEMBERS

Of The San Diego Cactus & Succulent Society

This month's meeting will host a very important event:

OFFICER (1999 - 2000) ELECTIONS

We are looking for a few enthusiastic workers and good leaders! The following positions will be up for election: President, Vice-President, Secretary, and Treasurer.

Now, please don't be shy! If you are interested in committing your time and effort to the good of this educational society — please consider running for one of these offices. Please contact **Laura DeMerritt @ (619) 270-5544** (nominating committee), or any of the board members or present SDC&SS officers with any questions. Phone numbers for all officers and board members can always be found on the back cover of the *Espinas y Flores*.

Please submit your name to Laura DeMerritt if you would like to be a candidate for any of these positions. All candidate submissions must be by 11/12/98. Election ballots will be handed out prior to the start of the meeting. The voting will take place during meeting intermission with results to be announced at our December Holiday Meeting.

I am asking each and everyone of you to please consider running for any of the offices listed above. Our club has a lot of experienced and talented members — please let's spread it around. Diversity is the life blood of an organization like ours. Please, if you have never served as an officer before, but have some great ideas and some new energy: **WE NEED YOU!!** If you enjoy all the activities of the San Diego Cactus & Succulent Society, then it is time to make the big commitment.

Sincerely,
Laura DeMerritt
Nominating Committee

The Monthly Benefit Drawing

Our October table was a delightful harvest of great plants — not a "pumpkin" in the bunch! Our thanks to **Joe Kraatz** for his procurement efforts in finding us some very unusual and interesting plants. Nice work Joe! Many thanks to our generous donors:

Michael & Joyce Buckner for adding four species of *Peperomia*; **Amna Cornett** for *Peperomia incana*; **Elibet Marshall** for *Mestoklema arborescens*; and to **Ann Robinson** for donating a Mini-greenhouse propagator.

You, too, can make a contribution to the November Benefit Table. Take a look at your collection and bring in something for the Brag Table and something for the Benefit Table. If you have a donation please contact **Betty Athy @ 619-469-7647**.


Thanks, Kay Quijada

BRAG TABLE WINNERS FOR OCTOBER 1998: JUDGED BY PHYLLIS FLECHSIG

CACTUS:	FIRST PLACE:	Monte Woodworth's <i>Astrophytum myriostigma</i>
	SECOND PLACE:	Don Patterson's <i>Ariocarpus fissuratus</i>
	THIRD PLACE:	Monte Woodworth's <i>Astrophytum capricorne</i>
SUCCULENT:	FIRST PLACE:	Michael Buckner's <i>Ornithogalum graminoides</i>
	SECOND PLACE:	Michael Buckner's <i>Drimia haworthoides</i>
	THIRD PLACE:	Rudy Lime's <i>Pelargonium reniformis</i>



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Eileen Alice Golden Smith

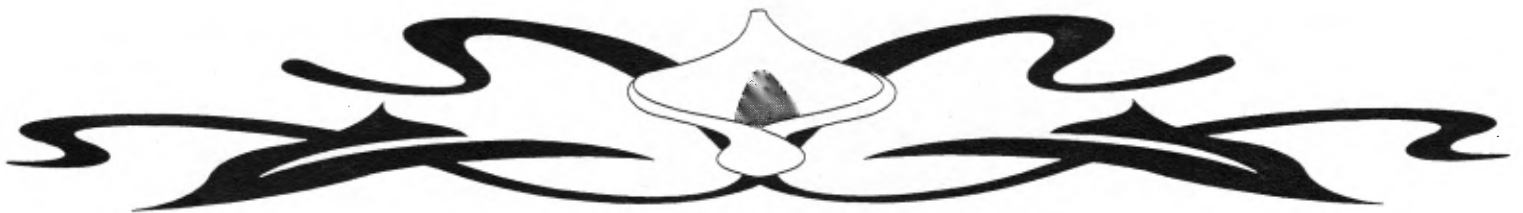


Eileen Smith, a member of the San Diego Cactus & Succulent Society passed away on October 15, 1998 at the age of 86 years. I remember, just like it was yesterday the first time my sister, Cathy, and I met Eileen and her husband Ronald. It was back in 1981 at the very first SDC&SS meeting that we attended. Right away she introduced herself and her husband, and she invited us to sit down by them. We always looked forward to seeing them, but in the past ten years I have not seen her and wondered what happened to her.

Having read her obituary in the San Diego Union-Tribune, I decided to attend the memorial service held at the Bancroft Ranch House in Spring Valley, on Tuesday, October 27th. I learned a lot about this kind woman. She was very active in the San Diego Historical Society and the Spring Valley Historical Society. She was active in our club too, volunteering for the annual show by helping out where she could. She was also a nurse before she married Ron.

I fondly remember that she and her husband, Ron were always together, they were never seen apart. She was an inspiration to a lot of people and affected their lives for the better. She touched your heart when you talked to her. I miss her a lot. To me she was like a mother of the Cactus & Succulent Society. I can now say I lost two mothers this year Eileen Smith and my mother.

Sincerely,
Sandy Frost



DECEMBER HOLIDAY MEETING & DINNER PARTY STARTS AT NOON. WE WILL HAVE OUR HOLIDAY GIFT EXCHANGE - IF YOU HAVE NOT PARTICIPATED BEFORE, IT WORKS LIKE THIS:

ANY MEMBER OR GUEST MAY PARTICIPATE; ALL YOU DO IS BRING IN A CACTUS OR SUCCULENT PLANT WHICH IS DESIRABLE. IT SHOULD BE IN GOOD CONDITION AND NICELY POTTED. INCLUDE A LABEL THAT IDENTIFIES THE PLANT ON ONE SIDE AND HAS YOUR NAME ON THE OTHER SIDE. THE FIRST PLANT TO BE SELECTED WILL BE AUCTIONED OFF AT THE END OF MEETING. THE PERSON WHO BROUGHT IN THE FIRST SELECTION GETS FIRST CHOICE FROM ALL REMAINING PLANTS. WHENEVER A PLANT IS SELECTED, THE PERSON WHO BROUGHT IT GETS THE NEXT CHOICE, SO THE MORE APPEALING THE PLANT THAT YOU BRING IN THE EARLIER YOU WILL GET YOUR CHANCE AT THE "GEMS". PLEASE, ONE PLANT PER PERSON. WHAT A TERRIFIC WAY TO GIVE, RECEIVE, AND BROADEN YOUR PLANT COLLECTION ALL AT THE SAME TIME!!

CACTI OF CHILE AND PERU

BY WENDELL S. MINNICH

The cacti of Chile and Peru are some of the most exciting and unusual of those found in South America. Having had the fortunate opportunity to have traveled this past year to both of these fascinating countries, I want to share some of my personal knowledge regarding the cacti that I encountered on these trips.

Chile and Peru are both western coastal countries that span most of the length of South America. Both countries are lucky in having numerous cactus habitats created by their impressive and formidable eastern boundary, the Andes. Both countries have very significant coastal habitat, climate and conditions similar to that of southern California. In Chile the Atacama Desert is most severe, where in some locals' lifetimes there has never been any recorded rainfall. Parts of the Atacama are only watered by the Garuna fogs, which come in at late day and burn off the next day by mid-morning.

The genera that occur in Peru are many, ranging from *Trichocereus*, *Oroya*, *Lobivia*, *Tephrocactus*, *Opuntia*, *Melocactus*, *Matucana*, *Haageocereus*, *Arequipa*, *Oreocereus*, *Islaya*, and others. The habitats of these genera are from sea level to 15,000 feet in the Cordillera Blanca and from very dry areas to extremely wet-humid river valley, as well as from extremely hot to bitterly cold locations. One of the best known and the only representative from Peru, is the beautiful *Melocactus peruvianus*. *Opuntia pachypus* is another unusual and very rare Peruvian

plant seldom seen in cultivation. It grows as a two foot solitary stem and is endemic to small inland canyon regions. Another unique and attractive cactus form Peru is the semi-tropical species *Matucana madisoniorum*, which inhabits hillsides along the Rio Maranon where it grows to large proportions of up to 18 inches in height. *Matucana madisoniorum* is also known for its habit of producing very long beautiful black spines — and with some individual plants — no spines at all.

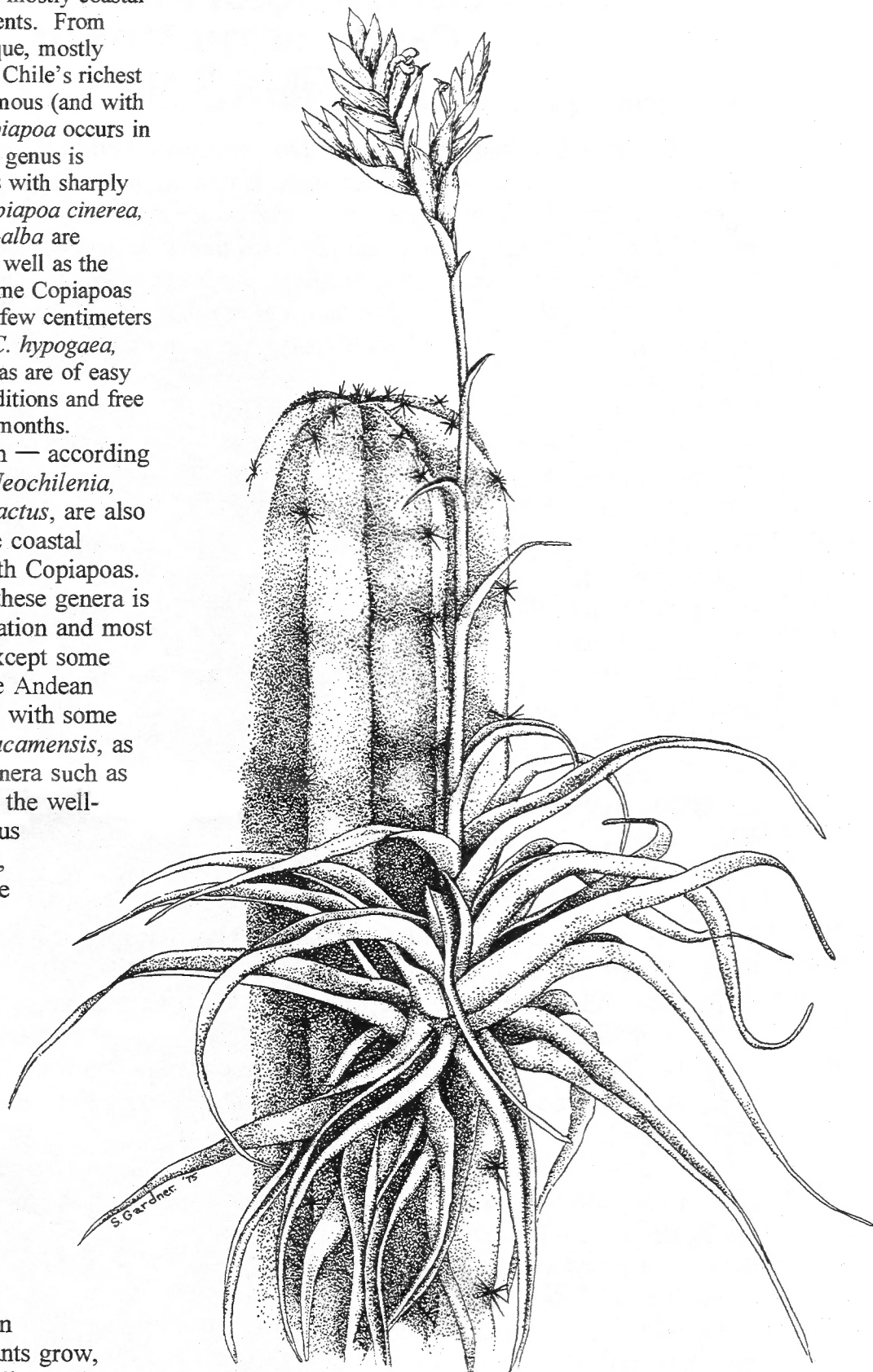
Haageocereus and *Islaya* come from the very dry southern coastal regions of Peru where they are found growing in sand dunes and rocky outcroppings. These two densely-spined genera subsist mainly from the moisture they derive from the daily fogs. Both are often found growing with very interesting tillandsias that also crawl along the desolate beach sand dunes.

In the high Cordillera Blanca one can find the very handsome spined *Oroya*. This genus is accustomed to growing in altitudes from 10,000 to 14,000 feet — areas where winter snow is very common. The genus *Oroya* is endemic to Peru and includes a number of interesting species. The genus *Lobivia* is also very common throughout Peru with many species being found at high altitudes and with a fair number from lower dry regions. Near Arequipa in the southern portion of Peru one can also find *Lobivia*, *Tephrocactus*, and *Trichocereus* growing with the area's namesake, the genus *Arequipa*.

Chile, unlike Peru, is mostly coastal or Andean foothill environments. From Santiago north to about Iquique, mostly along the coast, one can find Chile's richest stands of cacti. The most famous (and with good reasons), the genus *Copiapoa* occurs in large populations. Often this genus is typified by ashen-grey bodies with sharply contrasting black spines. *Copiapoa cinerea*, *C. dealbata*, and *C. columna-alba* are probably the most popular as well as the most difficult to acquire. Some Copiapoas are miniatures only getting a few centimeters across, such as: *C. humilis*, *C. hypogaea*, and *C. laui*. All the Copiapoas are of easy culture, liking hot bright conditions and free watering during the summer months.

The *Eriosyce*, which — according to Katterman — includes *Neochilenia*, *Neoporteria*, and *Horridocactus*, are also abundant along most of the coastal foothills, often growing with Copiapoas. A nice fact about most of these genera is that they are of easy cultivation and most do not get terribly large, except some Copiapoas. Higher into the Andean mountains, Chile is blessed with some very large *Trichocereus atacamensis*, as well as other interesting genera such as *Tephrocactus*, *Lobivia*, and the well-known *Oreocereus*. A genus which includes five species, *Eulychnia* is of considerable interest, growing only along the coast often with the Copiapoas.

The most interesting of all aspects about the cacti of these two countries is that they grow in parallel environments to our own southern California, and in most cases they are extremely well suited to our conditions. Chile is much like Baja California in the manner in which its plants grow, and inland Peru is very similar to the southern California coastal foothills. These genera are best suited to outdoor conditions and most species lend themselves well to container culture. If you do not have a *Copiapoa*, an *Oroya*, a *Neochilenia*, or a *Eulychnia*, now is the time to start!



Tillandsia cacticola
found in Peru growing on cactus.

RHIPSALIS, HATORA AND LEPISMIUM

CACTUS OF THE MONTH

BY GREG WADE

Do you like hanging plants? Do you grow epiphyllums (epis)? These three genera, *Rhipsalis*, *Hattoria*, and *Lepismium*, if you do not already have them, may be just right for you. The flowers are not nearly as big or showy as epis, but some of these plants have such unusual stems that it is hard not to appreciate their year-round beauty.

These plants come from tropical places in South America. They grow in Columbia, Ecuador, Peru, Bolivia, Venezuela, Paraguay, Brazil, Uruguay, and Argentina. One species, *Rhipsalis baccifera*, comes from Africa and the island of Madagascar.

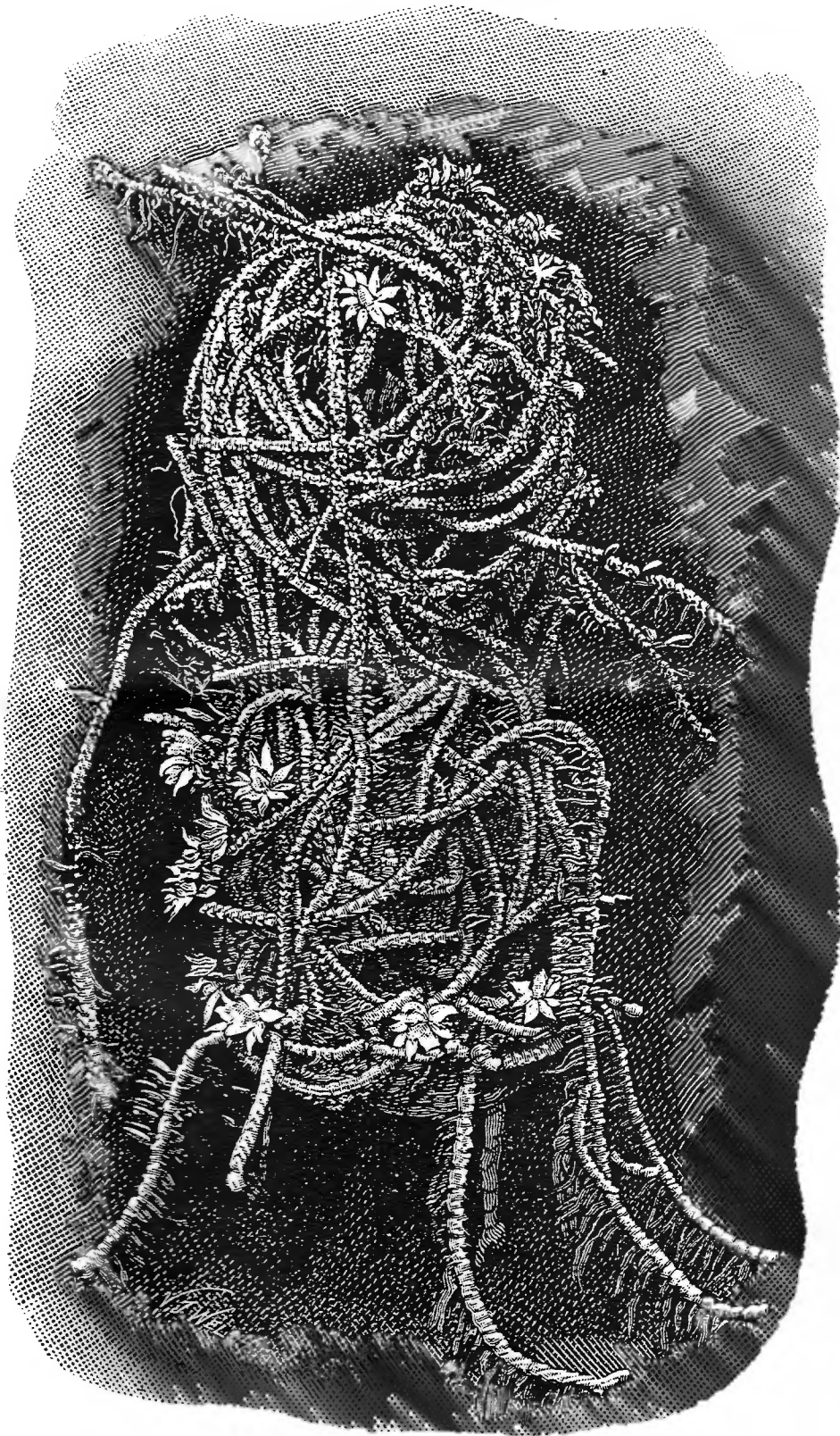
All these plants and the genus *Schlumbergera* make up the tribe called Rhipsalidae. The genus *Rhipsalis* has five subgenera and 33 subspecies. The genus *Hattoria* has two subgenera and five subspecies. The genus *Lepismium* has six subgenera and 14 subspecies. This was the count in 1995. How many relatives are undiscovered? The number is probably phenomenal, given the vast unstudied and unsettled areas where they come from. While I may refer to the plants I have, I do not have the space to list all of the others.

The important characteristics of these plants are just as varied as their habitats. The stems can be cylindrical, flat, winged or angled. The last three shapes resemble epiphyllums. When the stems become old or diseased, *Rhipsalis* and *Hattoria* simply shed them. The stems die back to the nearest healthy joint and fall off. *Lepismium* does not necessarily do this, and may need an occasional pruning. The flowers are, as far as I know, unscented and come in an array of colors including white, greenish-white, silvery, yellow, orange, pink, red, carmine, scarlet, magenta or some combination thereof. Some species have color variations from flower to flower. Fruits can be naked or have bristly spines. When ripe, their colors can be white, golden-yellow, orange, red, pink, violet, purple, brownish-purple, magenta, dull green, or even black. They can also be translucent or opaque. The ones I have all flower in our springtime and it would not surprise me to learn that they all do.

In habitat, these plants are epiphytic (living in trees), epilithic (growing on rocks, mostly cliffs), and terrestrial. It seems that some species must grow in a certain way to flower and produce fruit. Many are found growing in all three ways in their native environment.

I have not encountered any real difficulties in growing these plants. I like the cylindrical stem species the best. I grow them under a patio cover where they are in bright shade with limited direct sunlight, especially in the winter. The thinner or more naked the stems are, the more careful you need to be with too much sun. You will know if a plant needs more or less sun by its color. Too much and they start to go to an unhealthy yellow-red; too little and they become dark green and leggy. I have found that each species has been its own experiment as to where to drive a new nail in my patio rafters. I grow them in standard cactus mix and feed them when they are growing and when they start to flower. I water them once a week and give them rainwater whenever possible. No matter how hot it gets, they never seem to need more water. The only time I might withhold water is if I knew that the overnight temperature might go below 40 degrees F — a rare occurrence in my area.

RHIPSALIS, HATTORA AND LEPISMIUM by Greg Wade continued



—*Rhipsalis sarmentacea*.

I have not had any problems with pests. The location I have them in would be real tricky for snails to get to. I use metal screen to keep the morning doves from nesting in the pots. These plants have been trouble free for me.

I have found *Rhipsalis* and *Hattora* for sale in many places, from Simpson's Nursery in Jamul to the Del Mar Fair. The most commonly available is *Hattora salicornioides*, also called Drunkard's Delight or Drunkard's Dream, because of its bottle-shaped stems. If you are interested in seeing the largest commercial selection of these plants that I have ever seen, you need only travel as far as Vista: Rainbow Gardens. This nursery is run by SDC&SS members Chuck Everson and Jerry Williams, and they are the most cheerfully helpful cactus and succulent nurserymen in San Diego County. (If not the world.) I do not know of any other nursery that has as many different species of these genera available as Chuck and Jerry — but be sure to call them first (760) 758-4290.

In conclusion, if you run out of space for more pots and there is no more room for plants in the ground, start looking UP for places to hang and grow these wonderfully unusual hanging plants!

CONOPHYTUM . . . THE OTHER LIVING STONES

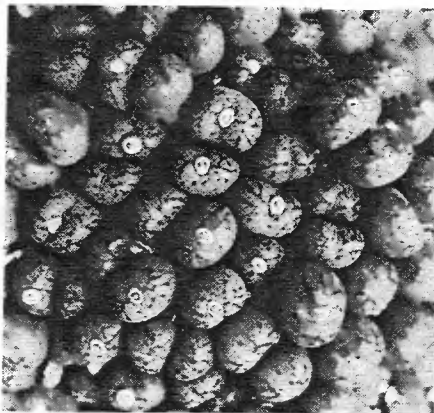
SUCCULENT OF THE MONTH BY KELLY GRIFFIN

The genus *Conophytum* is appreciably large and diverse. Among the many "cone leaved" species are a veritable smorgasbord of delectable morsels. Absolutely mind-altering color patterns combined with fantastically odd shapes await the patient cono grower (or determined collector).

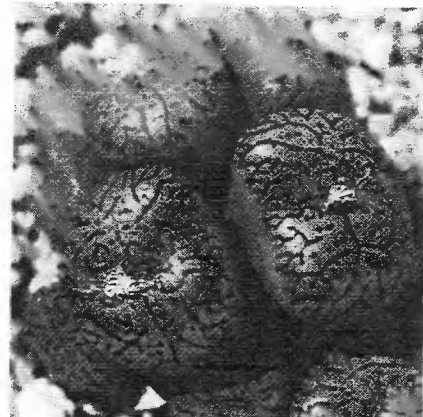
I know that many people's first experience with conophytums leads them to believe that these plants rot easily — and some do. However, it is my experience that most are not difficult to grow, and some species are down right indestructible. The key to success is understanding this genera's growth cycle. Most, if not all, conophytums need to be "dry" season summer dormant and prefer to grow with the shorter days and cooler wetter winter weather that we have in San Diego. Attempting to force them to continue year round growth is not only unreasonable, but often proves fatal for the plant. Because of this summer dormant

behavior, it is most difficult to convince an otherwise learned plant grower to leave these plants dry. If you should visit a cono grower's collection in the months of June or July, they look like pots of death, but stop by the same collection in September, October, or November and you are in for a treat. Conophytums, for such diminutive plants, have quite spectacular flowers in shades of pink, fuchsia, yellow, and white.

The major difference between lithops and conophytums is the fused flower petals of *Conophytum* form a corolla tube, whereas flowers of *Lithops* are bractless and tubeless. Another difference that is certainly not all-inclusive is that many species of *Conophytum* form sheaths from the outer leaves which protects the plant in dormancy. This gives the impression of death, but is merely a cover on the resting plant — that is, at least hopefully, as some plants occasionally fail to "wake up".



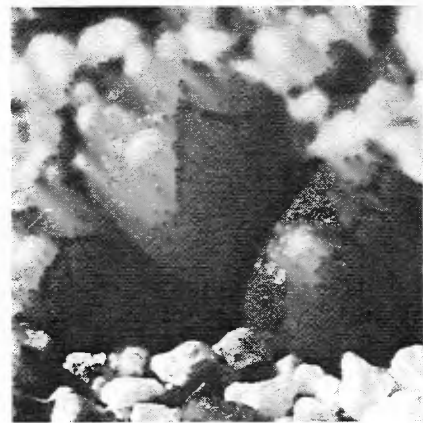
Conophytum uvaeforme



Conophytum wittebergense



C. ectypum v. tischleri



Conophytum ficiforme "Fossulatum"

Photographs taken from **Living Stones Nursery 1995/96 Catalog** by Jane Evans and Gene Joseph. This is definitely one of the best sources for conophytums in the United States. Send \$2.00 to Living Stones Nursery, 2936 N. Stone Avenue, Tucson, AZ 85705 for current catalog; (520) 628-8773.

CONOPHYTUM BY KELLY GRIFFIN CONTINUED . . .

I know that many of you cannot tolerate the fact that for this dormant period these plants simply do not look that swell. I would remind you that we all have our moments! . . . when we are at less than our best, which simply makes the times when we are at our best that much more special. Now, I would be lying if I did not confess to considering trashing my "winter" growers a time or two. Near the end of summer when things are looking bleakest, I tell myself, "If I can manage to procrastinate until the nights start cooling down and the evening dew starts to settle on the plants, they will break out of their dormancy and all will be well!"

This philosophy does require that the cono grower make space for the dormant plants where they can be treated as such and not watered through the summer. Maybe an occasional light misting or two is all they get.

I have really enjoyed my conophytums tremendously this year. Some of that has to do with a change in perspective — it is amazing what a bump on the head can do for you! Several years back, I purchased numerous seed packets of *Conophytum* from Mesa Garden. Last year a few flowered, but this year many flowered and they are gorgeous! I have grown from seed to flowers the strange Hershey-Kiss shaped *Conophytum burgeri*, the green marble *Conophytum calculus*, the brown windowed *Conophytum pellucidum*, the lithop-like *Conophytum lithopsoides*, and the little fuzzy *Conophytum stephanii*. The little stephaniis have been grown outside in Encinitas, of course, protected from the rain but exposed to the dew. So far, they have all been easy to grow and very undemanding. I am sure there are some that are difficult, but I have not had any problems thus far.

The real thrust of this article is to encourage you to take a look at this group. I know far too little about these plants — having done absolutely no field work on this genus to convey some special insight. Rather than trying to impart some great "Cono" wisdom, I would strongly encourage you check our library or the books at Rainbow Gardens Bookshop in Vista. The major reference work on this genus is **THE GENUS CONOPHYTUM** by Steven Hammer. It is truly a fantastic work — well written and full of good photographs. All botanical authors should aspire to achieve the level of this work! I highly recommend you take a look at it, but I warn you: you might get hooked!

If you are interested in obtaining plants, I suggest that you contact Steven Hammer in Vista and request his plant list. Also, hopefully he will be offering some fine mesembs including conophytums at our January Winter Show & Sale. The best source of *Conophytum* seed I have found is from Mesa Garden, Box 72, Belen, NM 87002.

Please bring your smiling face and a *Conophytum*, or two, to our November meeting!

(editor's note: A brand new book, **MESEMBS of the World** by G. Smith, E. van Wyk, Steven Hammer, et al has just been released. According to SDC&SS Life Member **Phyllis Flechsig** it is a first rate production and a must have for anyone interested in conophytums, lithops, etc. This is a hardbound book, 6½" x 9½", 408 pages with full descriptions of all 123 genera in the family and of utmost importance: includes a scientific key to the genus. This illustrated guide [701 color photographs] is a limited edition and will not be available for long. Cost is \$59.95 plus tax & handling of course, please contact Rainbow Gardens Bookshop, 144 E. Taylor Street, Vista, CA 92084; phone (760)758-4290, and please say hi to Chuck & Jerry for us!)

SAN DIEGO CACTUS AND SUCCULENT SOCIETY

APPLICATION FOR SALES AT THE WINTER MINI-SHOW AND SALE

This January, Saturday the 9th of 1999, we will have a show and sale much like we had in January of 1998. **Please Note:** This will be a one day event, from approximately 9:30 AM to 5:00 PM.

We would like to invite anyone who is a current member to have an opportunity to sell plants, pots, or anything else that is appropriate to growing succulents. You do not need to be a commercial vendor, or have sold any items at our regular monthly meetings to participate.

All sales will made at our check-out tables using our scanning cash register as was done at our summer sales of 1997 and 1998. The percentages paid to the vendor and the amount that will go to our treasury are as follows:

	Vendor	SDCSS
Plants	70%	30%
Pots, etc.	80%	20%

All items for sale must have bar code labels attached for the speed and accuracy it provides. The UPC code used is the look-up table standard as approved by the California Cactus and Succulent Societies. Please contact the sales chairman for details about acquiring (purchasing) labels. If you already have UPC labels, but have never used them for a San Diego C&SS sale, please include a sample label with this application. Contact **Tom Birt @ (619) 452-0389** with any questions regarding cost and limitations of price code labels. **Deadline for label orders: December 21st.**

No field collected plants are allowed to be sold. Plants must be clean and pest free. All sales items will remain in the sales area until close of show.

The society is not responsible for lost or stolen items. All vendors should plan to spend some time in the selling area during the sale. **Deadline for vendor registration: December 15th.**

Number of tables needed _____

Name of company _____

Name of member(s) _____

Check payable to _____

Will you be selling pots or plants? _____

If both, a different set of labels will be needed for each.

Your support is needed in the setup and the breakdown of the sales area. Please let the sales chairman know which part you will be helping with, so you can be scheduled.

THANK YOU! We are looking forward to a terrific and rewarding show and sale.

(X) _____, Date _____

Show chairman: Ed DeLollis (760) 945-7892

Sales chairman: Tom Birt (619) 452-0389

The SDC&SS encourages all vendors to show plants and/or have a display in the show, please contact **Show Chair Ed DeLollis @ (760) 945-7892** to reserve show space.

Please mail this application to: Tom Birt
8187 Via Mallorca
La Jolla, CA 92037



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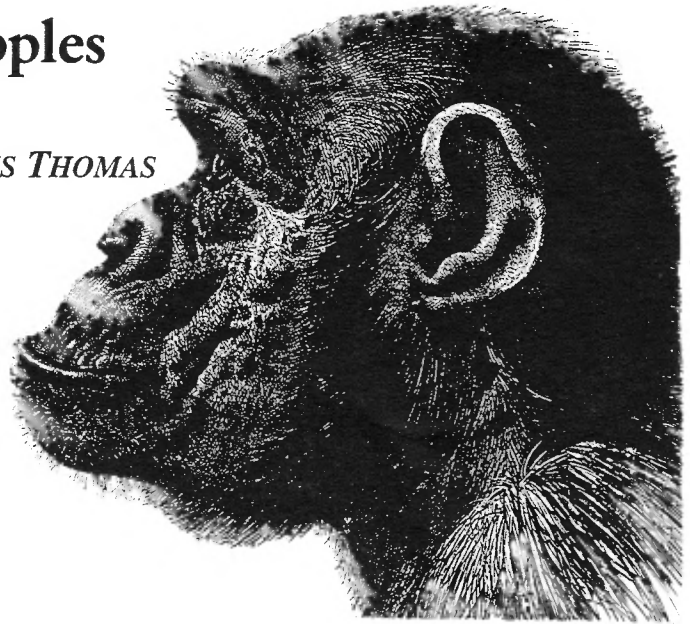
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Great mother of big apples
it is a pretty world.

— LEWIS THOMAS

WISE AND OTHERWISE

by Michael Buckner



Alaska is our biggest, buggiest, boggiest state. Texas remains our largest unfrozen state. But mountainous Utah, if ironed out flat, would take up more space on a map than either.

— EDWARD ABBEY

Today specialists identify some 1,100 species in the order Scorpiones, almost 100 of which live in the United States. Their range here extends north to British Columbia or southern Illinois, though the greatest diversity occurs in the Southwest; about 35 species live in Arizona.

In all of these species, the creature's basic structure does not vary: a hard exoskeleton, eight legs, two pincers somewhat reminiscent of those on a lobster, and a curling tail capped with a needlelike stinger. That latter single, waving and hypnotic body part has horrified humans for centuries — and for good reason. Some two dozen species of scorpions carry venom that is potent enough to kill people. But such fatalities are rare; a North African species, often ranked as the world's most dangerous, kill only 2 percent of its human victims.

In this country, only one species — the two-inch-long bark scorpion (*Centruroides sculpturatus*) of central and southern Arizona — carries such lethal venom. But the last documented U.S. death caused by the creature occurred more than 40 years ago. Of more than 6,000 people reported stung by scorpions in Arizona last year, only about 100 required the antivenin which is produced from the creatures' venom. Most of those were either children or elderly people. Healthy adults who are stung generally suffer intense pain, but no long-term damage.

"It really hurts," say Polis of the bark scorpion's sting, which he has experienced twice. Once he grabbed a towel in which a scorpion was lurking; another woke him, jabbing his arm in the middle of the night. "At first it's like a hot needle. Then it starts pulsating. It becomes really electric, like putting your finger on a live hot wire." Even after the local pain fades, he say the electric feeling lasts for weeks.

By Peter Friederici - CLASSIC BEHAVIOR: *IN THE GAME OF SURVIVAL, THE SCORPION IS A SUPERSTAR*; page 16-17 of *National Wildlife* magazine April-May 1998.

There ain't no way to find out
why a snorer can't hear himself snore.

— MARK TWAIN

**A mile walked with a friend
has only one hundred steps.**

— *RUSSIAN PROVERB*

**WISE AND
OTHERWISE**



**My books always make the best-seller lists in Wolf
Hole, Arizona and Hanksville, Utah.**

- *EDWARD ABBEY*

Scorpions have elaborate courtships which involve "dancing" back and forth while the male holds the female's chelae (*ed: the pincers on the pedipalps*) clasped in his own. This may last for several hours. Eventually the male deposits a spermatophore (sperm package) on the ground and maneuvers the female's genital opening over it so she can pick it up. The sperm package is stored and later its contents are used to fertilize her eggs. Young scorpions develop within the body of the female and are born alive. After their birth, the female carries them about on her back until they have undergone at least one molt (shedding of skin). Eventually they leave their mother's back to begin an independent existence. The immature scorpions molt seven times to reach maturity in about a year. Adults may live for several years. Scorpions in Arizona are preyed upon by grasshopper mice (*Onychomys* spp.) other rodents, birds, and reptiles.

Precautions and Control: Scorpions are a normal and desirable component of Arizona's varied ecosystems. They should be regarded with appreciation for their essential ecological role in regulation populations of plant-eating insects. To minimize the occurrence of scorpion stings, one should: remove loose boards, woodpiles, rocks, and debris from areas immediately surrounding homes; wear leather gloves and exercise caution when moving objects in yards or at campsites. When camping, invert and shake out sleeping bags, clothes, and other items that have been in contact with the ground, and shake out shoes before putting them on in the morning. Always wear shoes when walking at night. All members of the family should be able to recognize scorpions, and everyone should be aware of the danger they pose; special care should be taken to caution children, and older persons who have recently moved to Arizona from more northern latitudes. An infant's crib can be protected by placing the legs of the crib in clean widemouth jars. Scorpions cannot climb clean glass.

Robert L. Smith, *Venomous Animals of Arizona*; 1989, The University of Arizona, Tucson, AZ.

It is easy to find fault, if one has that disposition. There was once a man who, not being able to find any other fault with coal, complained that there were too many prehistoric toads in it.

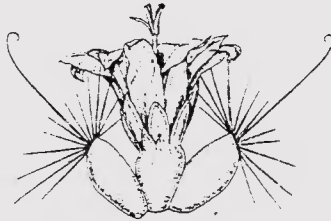
- *Pudd'nhead Wilson's Calendar* - *MARK TWAIN*

Few things are harder to put up with than the annoyance of a good example.

- *Pudd'nhead Wilson's Calendar* - *MARK TWAIN*

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Espinas y Flores

Editors: Michael & Joyce Buckner - (619) 477- 4779
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The San Diego Cactus and Succulent Society, Inc. is open to all persons interested in growing cacti and other succulent plants. Meetings are held the second Saturday of each month (except June, Sept. and Dec.) at 1:00 PM in room 101, Casa del Prado, Balboa Park. Executive Board meetings are open to all members; call any officer or director for the time and location. Annual dues are \$10.00 per single member per year, \$5.00 for each additional member within the same household. Single copies of *Espinas y Flores* are \$1.00 per copy sent within the USA; foreign subscriptions are \$25.00. Affiliated with the Cactus and Succulent Society of America, Inc. Fax available - please call editor at (619) 222-3216 for number.



December Holiday Meeting Starts at Noon

Our holiday meeting is very special, tremendous fun, and should not to be missed — even if you just recently joined our society — don't feel you know enough people — or are still intimidated by the plants and their seemingly unspeakable names (*unpronounceable, maybe, but unspeakable? . . . well, maybe a few!*). The food is delicious. And the desserts, which are brought by our members, are absolutely fabulous!!! Top Hat Caterers of Lemon Grove has been serving us for the past twelve years. And the price is excellent (*\$14 per person*); and something new this year the cost of the dinner includes the cost of the gift plant. The SDC&SS actually does supplement this amount as the cost of the gift plant and dinner is much closer to \$18 per person than it is to \$14! It was the decision of the SDC&SS Board of Directors that it would be more appropriate to raise the cost of the holiday dinner with gift plant than to raise the cost of the dues.

All members who have paid the \$14 for their holiday dinner will receive a ticket for the gift plant drawing which goes on as our dinner is being served and eaten. Please note: if you are operating on a very limited budget or fixed income that was set sometime back in the 1970's and feel that the raise in the cost of the dinner presents you with a financial hardship, please contact an SDC&SS officer or board member, and special arrangements will be made. We want every member to be able to join us for the food, the plants, and the fun this December. If you are a vegetarian or have other diet limitations please note them on this form, so that Top Hat Catering can provide all of us with the correct dinner! There is also a plant gift exchange which we hope you all will participate in.

If you plan to attend the holiday dinner on December 12, 1998, please send in (or bring to the November meeting) this form along with your check. **AND IF YOU NEED TO RENEW YOUR DUES FOR 1999, THEN TURN THIS FORM OVER A FILL OUT THAT PART, TOO!!**

Please reserve Holiday Dinners and Special Succulent Gift Plants for the Following Members @ \$14.00 per person:

Member name(s) _____

The SDC&SS Holiday Meeting begins at 12:00 noon - Holiday Dinner to be served at 1:00 pm - Plant Exchange begins at 12:30 and continues through dinner. Gift Plant distribution to commence once everyone has been served their dinner.

**PLEASE MAKE CHECKS PAYABLE TO: SDC&SS
P.O. BOX 33181
SAN DIEGO, CA 92163-3181**

SAN DIEGO CACTUS & SUCCULENT SOCIETY MEMBERSHIP APPLICATION

The San Diego Cactus & Succulent Society is a nonprofit, hobby organization created to stimulate interest in succulent plants. This society brings together people with a common interest for the purpose of educating the public about the beauty and uniqueness of these remarkable plants, encouraging proper collecting and maintenance of the plants through preservation of native habitats and horticultural propagation, and to foster good fellowship. You are invited to join our society, whether you are an expert, amateur, or a beginner with an interest in unusual plants and flowers.

You will receive our publication *Espinas y Flores*, one of the best cacti and succulent newsletters. We produce 11 issues a year. You will get great articles and keep up with club news for the next year.

Our meetings are on the second Saturday of the month (except June and September) and newsletters are received the week of the meeting. We offer knowledgeable speakers who present educational & entertaining programs; many are world renowned scholars, botanists, explorers and authors. The San Diego Cactus & Succulent Society's Annual Show and Plant Sale occurs the first weekend of June in Room 101, Casa del Prado, Balboa Park, San Diego. A wide range of succulent plants, ceramic pots, and growing supplies are available during most meetings. There is also a plant exchange table and a library. For more information regarding membership, please call Joey Betzler, Membership Chair, at (619) 569-8510.

Yes, I/We wish JOIN or REJOIN the San Diego Cactus & Succulent Society.

NAME(S): _____

ADDRESS: _____

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Do you know that for an additional \$5.00 paid on your membership dues - you can have *Espinas y Flores* delivered by first class mail, instead of bulk mail? Check here and add \$5.00 to your dues payment, if you are far away you will receive our newsletter faster.

Dues are \$10.00 per person, \$5.00 for each additional person in the same household for (bulk rate USA), add \$5.00 for First Class Delivery (optional). International dues, including Mexico and Canada, are \$25.00 (US funds), additional members as above.

◆ Amount enclosed \$ _____

Thank you for joining the SDCSS

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