

# Espinas y Flores

*MAMMILLARIA THORNERI*

NEWSLETTER OF THE SAN DIEGO CACTUS AND SUCCULENT SOCIETY  
Affiliate of the Cactus and Succulent Society of America, Inc.  
VOLUME XXX NUMBER EIGHT, SATURDAY, AUGUST 12, 1995 @ 1:00PM



"MONSTER CACTUS," AT THE ROYAL BOTANIC GARDENS, KEW.

**AUGUST PROGRAM:** We are going to have a very august August meeting as we will be treated to another double screen /projector slide [bigger screen this time!] show. This month member Monte Woodworth will show us the best of Baja California. For 17 years Monty has been the operations manager for Baja Discovery, a natural history tour business. You will be treated to incredible slides of the unique flora and fauna of Baja with a major focus on the grey whale migration and calving in Ignacio Lagoon. See the information brochure inside for more details. This slide show will delight you, your family, and your guests – so, see you all there!

Our front cover: "'Monster Cactus' at Kew", from *The Illustrated London News*, Oct. 17, 1848. The "Visnager" pictured was sent as a gift to the Royal Botanic Gardens at Kew, England, by F. Staines, Esq., from San Luis Potosi, Mexico. Its height was 9 feet; its circumference 9½ feet; and its weight one ton! "On its arrival, it appeared in the most perfect condition, and threw out flowers in a few weeks, from the crown, or top of the plant; but, in the present instance, these efforts, like the reputed song of the swan, were only indicative of its dying state. It had received bruises on the journey or voyage; the decay gradually extended; and though its bulk and form may for a time remain, it can no longer be numbered among the *living* plants at the Royal Gardens. We are sure that it will be acceptable to our readers to see the representation of so extraordinary a vegetable production."

– Reprinted from *Cactus & Succulent Journal (U.S.)*, vol.XLIX, 1977.

**The SDC&SS September Picnic & Plant Auction will be held on the third Saturday, September 16th. The Huntington Succulent Symposium is on the 9th and there are many of us who wish to attend both of these events.**

**PLEASE MARK YOUR CALENDAR.**

☼ Please remember to bring refreshments to the August meeting ☼  
MANGOS, MUNCHIES, MILK CHOCOLATES, MUFFINS, MINTS

**BRAG TABLE WINNERS FOR JULY 1995:  
JUDGED BY KELLY GRIFFIN**

**CACTUS:**

- FIRST PLACE: Joe Quijada's *Pseudolobivia torrecillasensis*  
 SECOND PLACE: Shirley Berry's *Lobivia* species  
 THIRD PLACE: Shirley Berry's *Lobivia famatimensis*

**SUCCULENT:**

- FIRST PLACE: Rudy Limes's *Sarcocaulon salmoniflorum*  
 SECOND PLACE: Alan Weiss's *Pachypodium baronii* var. *baronii*  
 THIRD PLACE: Joe Quijada's *Dyckia plattiphylla*

**HAWORTHIAS ONLY BRAG TABLE:**

- FIRST PLACE: Michael Cullen's *Haworthia emelyae*  
 SECOND PLACE: Michael Cullen's *Haworthia truncata* x *maughanii*  
 THIRD PLACE: Michael Cullen's *Haworthia maughanii*

**WELCOME NEW MEMBERS!!!**

Erick Altona & Jeri Lindberg  
 Ken & Susan Shepard Brown  
 Donna Cheverton  
 Florence Conley & Ann Cotter  
 Christina Clifford  
 Beth Dargan  
 Michele Finchum  
 Sandy Franklin  
 Pat & Mindy Fusaro  
 Jean Gable  
 Stephanie Gaydos  
 Jeffrey Goldberg  
 Glen & Susan Grady  
 Charles Hansen  
 Sharron Hansen  
 Michelle Higgins  
 Paul Hoffman

Bonnie Johnson  
 Eugene Lund  
 Kaija Marcon  
 Melanie Menders  
 Jerry Messex  
 Bill & Jean O'Daniel  
 Chip & Lupita Raczka  
 Dan Richardson  
 Robert Rogers  
 Carol Roberts  
 Loretta Sconce  
 Brian Shepherd  
 Chester & Beatrice Smith  
 Joseph & Liann Stead  
 Cheryl Weller  
 Joseph Wood  
 Lynn & LaWilla Wilson

We wish to acknowledge and elaborate just a little bit more about the many contributors to our tremendously successful (and interesting) June Show and Sale. Among them there are a few who went over & beyond any expectations and I feel the necessity to mention and thank them for their volunteered service:

**Duty Beyond Parameters Judges** – John Trager (of the Huntington) and Steve Plath (of the Las Vegas Cactus & Succulent Society) were noticed carrying tables @ 7:30 Saturday morning down two flights of to facilitate the outdoor sale; this they performed willingly prior to starting their real assigned duties as judges.

**Canonization Awards** should go to Mike Cullen, Tom DeMerritt, George Plaisted, Paul Steward, John Williams, Joe Quijada, Tom Sitko, and Rick Plant. Consistently these gentlemen are the first to arrive and last to leave, busying themselves the menial tasks of carrying plants, setting up tables, hauling plants & supplies in their vehicles, picking up trash, and sweeping up when all the rest of you are on your way home.

Last but not least **The \$ Staying Afloat for Another Year \$ Awards** go to our splendid quality vendors: Woody & Kathy Minnich not only hauled all their own plants and set up tables, they were busy all weekend – and especially helpful & appreciated on Saturday morning – hauling the club's plants from sidewalk to sales table to indoors overnight and back out to the sales area early the next morning. Steve & Rowena Southwell, Phyllis Flechsig, Dick Hulett, Betty Athy, Dylan Hannon, and Floyd Gable also made themselves available all weekend to answer questions and assist the club in ways to numerous to mention.

Anyway, we just thought you all deserved a great big

# **Thank You!**

*Michael & Joyce Buckner*

## GRAY WHALE DISCOVERY

THE WHALES ARE COMING!...and Baja Discovery will be there again this winter and spring with our state-of-the-art "safari-style" camp at the shore of San Ignacio Lagoon in Baja California, Mexico...a place of exquisite natural beauty.

We invite you to come with us and meet these gentle giants who have traveled over 5,000 miles from the frigid waters of the Bering Sea to the warm waters of this desert lagoon to mate and calve. Join us for this once-in-a-lifetime learning vacation adventure. Experience one of the most spectacular wildlife phenomena in the world.

Choose from four, five, seven and nine-day itineraries

Departures from **January 27 through March 23**

Cost: \$870.00 to \$1720.00

### WALK BAJA

Baja is a walker's paradise!

Travel overland down the peninsula in air-conditioned vans and enjoy hotel comfort at night.

Each day, leisurely 3-to-6-mile hikes take you off-the-beaten-path from the unique cactus forests of Baja's deserts to the shores of both coasts.

Visits to the villages, missions and cave painting sites give historical and cultural insight.

Come with us...walk, look and learn!

4 to 8 Days

Year-Round

Cost: \$450.00 to \$1295.00

### SEA OF CORTEZ

Swim, kayak, snorkel, hike, photograph everything under the sun...or just relax!

From our camp nestled in an isolated cove, explore the many islands that dot the bay and observe the many sea birds, dolphins and whales that frequent the area.

Get in touch with nature...and yourself, at our remote vacation hideaway where the desert meets the sea.

7 Days

Spring & Fall

Cost: \$970.00

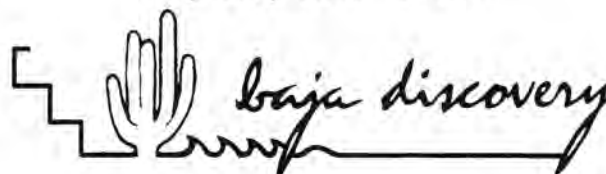
From the breathtaking panoramas of Baja's mountains, deserts and seashores, to the wonders of the tiniest of wildflowers on the desert floor, our programs will provide those of you interested in our natural world, a wonderful, peaceful venue for exploration.

Our groups are small. Our carefully selected, experienced and friendly staff are prepared to share with you the best of Baja in our own special and personal way!

We invite you to join us!

Call for more information and detailed itineraries

1-(800) 829-2252



Sat. & Sun. Aug. 19th & 20th, 1995  
From 9:00am to 5:00pm each day



10th Anniversary  
Inter-City  
Cactus & Succulent  
Show & Sale

Sponsored by the Los Angeles, Long Beach &  
San Gabriel Valley Cactus and Succulent Societies

PACHYPODIUM  
ROSULATUM

For information please contact:  
Larry Grammer 310-599-1146  
Woody Minnich 805-944-2784  
Charles Spotts 805-237-2054

**At the Los Angeles State & County Arboretum  
301 N. Baldwin Ave. Arcadia, CA**

# Variegation in Succulent Plants (Cactus Included) by Kelly Griffin

Variegation occurs in almost all plant forms from palms to ferns to succulents and it is one of the most common forms of chimeras. Simply stated, a plant is referred to as a chimera when it has cells of more than one genetic make-up growing adjacent in its tissue. In the variegated leaf sections, the cells are characterized by the inability to synthesize chlorophyll.

The apical meristem of a shoot is where the cells which form the structure originate. Chimeras arise when cells mutate. Depending upon the position of the mutated cells at the meristem, the variegation may appear as marginal, medial, striated or sectoral.

The marginal and medial forms, for example, *Agave americana variegata*, tend to be consistent and stable, but the sectoral variegates vacillate, sometimes throwing all white shoots and then sometimes reverting back to all green forms. *Haworthia cuspidata* variegata is a good example of unstable sectoral variegation. Some pups will be pure white while others are a mix or all green.

What causes variegation? Speculation abounds! *Opuntia vulgaris* is reportedly virus induced. The plant manages to survive with it. The "moon" cactus grafts are for the most part irradiated chlorophyllless

Sources:

Lineberger, R. Daniel, ORIGIN, DEVELOPMENT AND PROPAGATION OF CHIMERAS. Dept of Horticulture, Texas A&M University.

Stewart and Derman, Ontogeny in Monocotyledons as Revealed by Studies of the Developmental Anatomy of Periclinal Chloroplast Chimeras, *American Journal of Botany*, vol 66, pp 47-58, 1979.

plants which gather sustenance from the stock they are on. Chemicals have had some effect. Sometimes it just happens! They show up in seed batches or sport off a "normal" green plant.

Are variegates special? That depends upon who you talk to. Steven Hammer says they are genetically inferior, chlorotic wimps. I mildly disagree. Yes, they are genetically weaker and chlorophyll challenged, but they can be some of the most captivatingly beautiful specimens. In addition to being attractive, many variegates are quite rare due in large part to their slower growth rates and difficulties experienced in propagation. Producing any quantity can be quite frustrating. They seldom come true from seed and, of course, tissue culture is not reliable on variegates because the white cells produce white plants which soon expire and the green cells replicate to form green plants again.

Not all chimeras are variegates. While variegation is very obvious visually, other mutations can result in unique chimeras as well. For instance, thornless roses and berries, fuzzless peaches, and spineless cactus all exhibit a mutation in the epidermal layer as it is formed in the meristem.

# SUCCULENT OF THE MONTH: **SENECIOS**

BY MARYLYN HENDERSON

Senecios belong to the composite family, which includes daisy, aster, dandelion, marigold, and lettuce, and are relatives of ragwort and groundsel.

Jacobsen lists over 100 species, but these include *Kleinia*, *Notonia*, and *Notoniposis*, which have been difficult to separate. It is said that it would require a lab, a compound microscope, and university training to separate them. Different types of crystals are found in the ovary walls of *Kleinia* and *Senecio*, using a high-powered microscope. Later it was discovered that *Senecio articulatus* has both types of crystals.

It has been a great controversy for some time as to whether *Kleinia* and *Senecio* should be separated. The rest of the history and details and arguments are so boring to me that I choose to omit them! I will just add one humorous bit that I ran across about MacMillan, a one-time custodian of the succulent houses at Kew Gardens. MacMillan made two-sided labels with *Kleinia* on one side and *Senecio* on the other. When he sighted an approaching expert, he would rush to rotate the labels to appropriately support their beliefs.

*Senecio* takes its name from the word "senex" meaning "old man", in reference to the whiskered fruits, or seeds. Most succulent species are found in Madagascar and South Africa.

*Senecio* includes leaf succulents, stem succulents, and caudiciform plants. There seem to be no set rules to describe the plants, as there are exceptions to every rule. Senecios display an extraordinary variety of leaf and habit patterns. A few have a sweet fragrance, including *Senecio rowleyanus* and *Senecio radicans*, though *Senecio articulatus* has a musty odor. Some have leaves or stems with windows; some have leaves coated with wax; some have leaves with fur coats; many have leaves with the smell of resin or turpentine.

Gordon Rowley, in his new book SUCCULENT COMPOSITAE, states under the **Leaves** section: "When the stem is succulent and green and carries out photosynthesis, we usually find a reduction in foliage, right down to tiny scales (leaves-of-absence?)."

The inflorescence of senecios is made up of a number of small, separate tubular flowers (florets), packed tightly together in a level or domed head and surrounded by many leafy bracts. For some unknown reason, but probably related to climate, seed is rarely set in cultivated plants, even when hand-pollinated. Propagation, therefore, is only by vegetative means, except when imported seed is offered.



**Succulent of the Month: *Senecio* by Marylyn Henderson continued . .**

The diverse forms of leaves and stems make senecios very interesting. No other plant family produces anything like a String-of-Pearls — the *Senecio rowleyanus*, which is probably the most popular with its perfectly round leaves.

The following is another quote from Gordon Rowley's SUCCULENT COMPOSITAE: . . "shapes to delight the heart of any succulent lover; fat, fleshy, quaintly patterned stems, great swollen caudices and leaves of a bewildering variety of sculptural forms . . . packaged in eye-catching colors and surface textures, from freshly varnished green to marbled purple and silver, overlaid with bluish white wax that you dare not touch for fear of leaving a permanent thumb-print . . . in cultural needs that range equally widely, from plants you cannot stop to those you cannot start."

I have all of my senecios in my regular potting mix of SuperSoil and agricultural pumice. I water them the same as Crassulas and Kalanchoes. I don't seem to have any cultivating problems; perhaps I do not own any of the varieties that are difficult to grow. The most common pest that I have seen in my collection is root mealy. It usually surprises me to find them on perfectly healthy plants and has not seemed to have affected their growth. But I do use a soil drench of systemic insecticide, to cure this problem.

## **Letters to the Members**

*June 29, 1995*

*Dear SDC&SS Members,*

*Hi! I am now a resident of Escondido, California. My furniture will be shipped in about two months, at which time I will officially give up residence in Boston. I need you immediate help. Regulations vary from state to state, and there are also federal regulations regarding the transporting of plants across state lines. While in California I flew an assortment back to Boston. [Many were purchased @ one of our June shows — that's how she became a member!] What are my chances of the reverse of this? Is it possible to bring my cacti and succulents to California? Any information or advise you might have would be greatly appreciated.*

*Carmen Hammond  
40 Westwind Road - 751  
Boston, MA 02125-3510*

## STRAWBERRY PRESS - UPDATE AND PROGRESS REPORT

This open letter to STRAWBERRY PRESS subscribers, to members of the Cactus and Succulent Societies and to all fellow collectors and cherishers of plants shall be an Annual Report of my progress in the ultimate production of my "LIBRARY OF SUCCULENTS."

In the past 13 years I have published nine EUPHORBIA JOURNALS, THE CAUDICIFORM BOOK, THE SUCCULENT COMPOSITAE, AND Lemaire's CACTEES, plus my resident genius' (wife's) autobiography with 284 of her wonderful paintings, and "ADA" (Ada Lovelace Byron), the letters of Lord Byron's daughter, who with Charles Babbage invented the computer.

Somewhere along Volume VII of THE EUPHORBIA JOURNALS I decided to attempt to also document the other marvelous major groups of Succulents. By that time, I had gotten to know virtually all the world's authorities on the "other" Succulent families.

I decided to begin this process by asking Werner Rauh to allow me to publish his major life work: THE SUCCULENTS OF MADAGASCAR. In short order, the menu grew to projected series on the Asclepiads, the Aloes, the Succulent Compositae, Tylecodon & Cotyledon, and the History of Succulents.

Little did I know what I was getting into!

THE SUCCULENTS OF MADAGASCAR introduced me to some new realities of publishing. The early text grew dramatically in size over a two year period with new discoveries, revisions and illustrations. The problem of long distance editing imposed by volumes of 500 pages and over a thousand illustrations made it obvious that smaller but multiple volumes like THE EUPHORBIA JOURNAL would be not only simpler but also produce greater predictability of time of completion. With Professor Rauh's visit a month ago both volumes of his extraordinary SUCCULENTS OF MADAGASCAR were reviewed line by line (text, slides, and captions). The massive job of publishing Volume I and then Volume II is underway and should produce Volume I this summer.

It will be the most beautiful plant book ever produced!

Subsequent series, i.e., The Asclepiadaceae and The Aloes will be done in multiple volumes, each with shorter time frames rather than two massive volumes of each.

Volume X of THE EUPHORBIA JOURNAL is almost complete and should also be out later this year. It will be huge...as was Volume IX.

But, above and beyond the gestation and birth of my books I want address their finances.

THE EUPHORBIA JOURNALS were hatched in a period when it was possible to publish each Volume in Japan when the dollar was worth 320 yen. It is now worth 88 yen. Prices have soared to an unimaginable degree. At the same time I cannot bring myself to escalate my book prices to that same degree, for example, Volume IX (50% larger) cost 200% more to produce than Volume VIII. THE SUCCULENTS OF MADAGASCAR will cost about \$300,000 (Volume I) and so on in the same vein.

I am committed to producing my dream books. After a long time the aggregate sales by Volume VII of THE EUPHORBIA JOURNAL paid for a significant part of Volume VIII. This is no longer the case since factors have arisen which have made previous calculations obsolete.

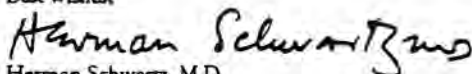
1) The cost of producing new, larger books is vastly greater than the Journal.  
2) My subscribers...for various reasons are buying my books from dealers rather than directly from me. Dealers pay slightly more than cost. They provide useful sales but do not help pay for future books. Dealers previously sold 40%, now 70% of my books. The difference between wholesale dealer cost and retail cost represents the income to STRAWBERRY PRESS which makes it possible to publish future books.

3) A publisher cannot survive with a payout period of 7-8 years for THE EUPHORBIA JOURNALS. God knows what it shall be with my new and larger books! No publisher in his right mind would ever embark on this process. This tells you something about my mind.

Since I hate to raise my prices the answer has to be...increase the rate of direct subscriptions. That can only come from you, my readers. There is no way I can continue to produce the exquisite one-of-a-kind, lavishly illustrated reference books I contemplate unless there are significantly more direct subscriptions.

I have to leave it up to you all to support this effort. I am interested in having comments and ideas from all of you. Meanwhile my weekdays are filled with books, weekends with keeping my plants alive in the wettest winter in history, and wondering when I can get back to Africa and Madagascar.

Best wishes,



Herman Schwartz, M.D.  
Publisher/Editor  
STRAWBERRY PRESS



STRAWBERRY PRESS  
227 Strawberry Dr., Mill Valley, CA 94941 U.S.A.  
PH (415) 388-5017-FAX (415) 380-9628

## WISE AND OTHERWISE

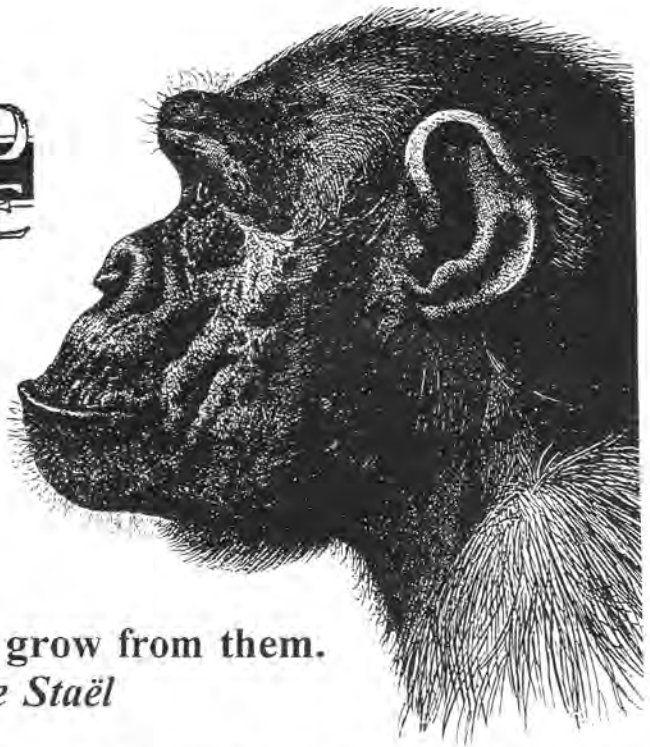
*"Our own life is the instrument with which we experiment with truth."*

THICH NHAT HANH

"Sow good services;

sweet remembrances will grow from them.

*Madame de Staël*



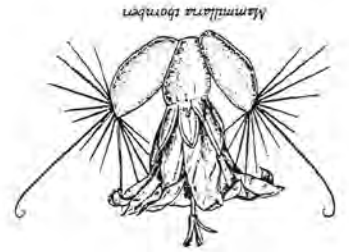
"Unfortunately, one factor that has contributed greatly to the creation of a plethora of superfluous names is the inaccessible nature of much cactus habitat. . . . Another important reason for the sudden demise of familiar species names is the fact that they were inadequately described in the first place so that we are not sure exactly what was meant. The situation is made much worse when no precise locality was given in the original description.

We can forgive Rausch and Ritter for describing so many superfluous 'new' species, because they at least gave precise localities for them. This has enabled subsequent workers to find and recognize the plants and make their own decisions about their true status. Rausch himself made the brave decision to 'lump' the majority of his 'new' species and produced a most sensible revision of the genus *Lobivia*.

Unfortunately, however, our ability to make sense of the chaos of names created by Backeberg is severely limited by his failure to cite localities for many of his 'new' species. In most cases he himself simply did not know and just went ahead with his descriptions without the remotest knowledge of the relationships of his 'new' species to any others in the area. In most cases, when these plants have been (after a great deal of trouble) finally nailed down to a locality, they have proved to be no more than local forms of (far worse) merely singular individuals plucked from a single variable population of long-known species.

Backeberg was not hampered by this lack of the proper data in his apparent frantic haste to create as many 'new' names as possible. The fact that we have been so eager to hang on to these names and so reluctant to abandon them is merely indicative of the eagerness of most collectors to name as many 'species' as possible — and I have been as guilty of this as anyone in the past."

*Cacti and Succulents in Habitat* by Ken Preston-Mafham, **THE NAME GAME**, Cassell Villiers House, London, 1994.



ADDRESS CORRECTION REQUESTED

The San Diego Cactus & Succulent Society, Inc.  
P.O. Box 33181, San Diego, CA 92163-3181

## *Espinas y Flores*

Editors: Michael and Joyce Buckner - (619) 222-3216  
4822 Santa Monica Ave #103, San Diego, CA 92107

### SAN DIEGO CACTUS AND SUCCULENT SOCIETY, INC.

#### 1995 EXECUTIVE BOARD

##### OFFICERS

President - Joey Betzler  
569-8510  
Vice President - Tom DeMerritt  
270-5544  
Secretary - Herb Stern  
223-9134  
Treasurer - Rick Latimer  
697-4100

##### EX OFFICIO

Immediate Past President -  
Michael Buckner  
222-3216

##### DIRECTORS

Elizabeth Athy  
469-7647  
Shirley Berry  
756-3659  
Dylan Hannon  
732-3508  
Tom Knapik  
462-1805  
Ed Nolan  
486-6195  
Kay Quijada  
282-5919

#### Standing Committees and Sub-Committees

##### Conservation:

Joey Betzler and Kelly Griffin

##### Education and Exhibits:

Brag Table - Shirley Berry  
and Kay Quijada  
Del Mar Fair - Michael Buckner,  
Tom DeMerritt, Marylyn  
Henderson and Susan Hopkins  
Plants of the month -  
Beverly Kirkegaard  
and Phyllis Flechsig  
Show - Joey Betzler  
and Tom Knapik

##### History: Richard Latimer

##### Liaison:

Balboa Park Desert Garden  
- Susan Hopkins  
CSSA Affiliate Rep.  
- Michael Buckner  
Quail Botanic Gardens  
- Phyllis Flechsig  
San Diego Botanical Garden  
Foundation - Rick Latimer  
San Diego Floral Association  
- Elizabeth Glover  
S.D. Wild Animal Park's Baja  
Collection - Frank Thrombley

##### Library:

Elizabeth Athy, Anna Cornett  
and Richard Latimer

##### Membership:

Elizabeth Glover (264-6769)  
and D'erdra Smothers

##### Plant and Seed Exchange:

Plants - Sara Schell  
Seeds - Kelly and Sean Griffin

##### Plant Sales and Supplies:

Annual Plant and Auction Sales  
- Michael Buckner  
and Richard Plant

Monthly Plant Sales - Michael Cullen,  
Marylyn Henderson, Gloria  
and Kenny Graham

Monthly Supply Sales - George  
and Jerry Plaisted

##### Publicity: Tom DeMerritt

Programs: Michael Buckner  
Reception:

Laura DeMerritt, Perlo Lewis  
and Marylyn Henderson

##### Regalement:

Monthly Meetings - Gail  
and Donald Bamber  
and Stefy Mangold

Picnic - Tom and Laura DeMerritt

##### - Other Committees -

Correspondence: Virginia Innis  
Host Society Chairman for 1997 CSSA Convention:  
Martin Mooney (427-6796)

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 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 \$20.00. Affiliated with the Cactus and Succulent Society of America, Inc. Fax available - please call editor at (619)222-3216 for number.