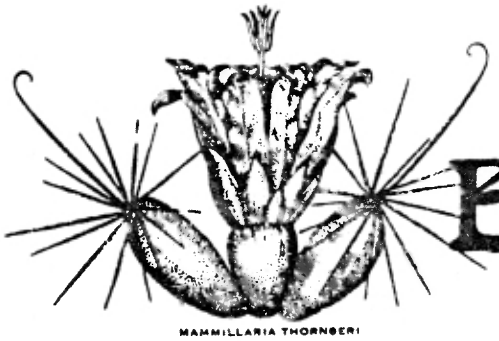

Espinas y Flores

BULLETIN OF THE SAN DIEGO CACTUS AND SUCCULENT SOCIETY
Affiliate of the Cactus and Succulent Society of America, Inc.

Vol. XIV, No. 9. September, 1979

September Meeting

Saturday, September 8th, 1979
1:30 pm
Casa del Prado, Room 101, Balboa Park

From A Judge's Viewpoint

by Dr. Leroy Phelps

The September program will feature a discussion on the many factors, and their relative importance, to be considered in judging plants on a competitive basis. Dr. Phelps is one of the most highly regarded judges of cactus and succulent shows in the southern California area.

In This Issue . . . . . Page

CACTUS-OF-THE-MONTH

Discocactus

Dr. Ronald E. Monroe

The genus Discocactus (disk cactus) was erected by Pfeiffer (1837) for three species of cactus found growing in a rather far-ranging distribution: the northern part of the highland of Brazil (states of Bahia, Gojas, Minas Gerais and Mato Grosso), eastern Paraguay and Bolivia (Brown, 1978). The elevation of the various habitats ranges from 200-2000 m and most of the plants are found growing in humid, warm (average temperature of about 26°C) locations, usually scaled rocks of granite outcrops intersperced with humus.

Although Britton and Rose (1937) recognized six species, Borg (1959) eleven species and Backeberg (1977) twelve species, few of the plants became popular until about 1970 when Horst and Buining began importing field-collected specimens into Holland and Germany. Even so, few could be established on their own roots; thus, most were grafted and seed from these plants slowly became available for distribution around the world. The genus has been recently reviewed by Braun (1978a,b,c,d; 1979,a,b,c) and the latest species described was by Pereira (1979).

The plants are somewhat small, globular and more or less flattened with ribs containing low podaria. The spines are short or long and more or less curved. The apex of mature plants contains a flower-bearing cephalium (or crest) which is made up of wool and bristles. The flowers are nocturnal and large, usually white or pale pink in color and have a long tube and spreading limb. Some species have scented flowers.

Most species in cultivation are D. placentiformis (with nice spidery, long spines), D. tricornis (with three main twisted spines), D. boomianus (with long, numerous spines) and D. boliviensis (with a deep green epidermis and one of the few caespitose plants). There is no doubt, however, that the most prized is the tiny D. horstii which seldom exceeds 4.5 cm diameter and has rather deep cut ribs with extremely small appressed spines.

Because Discocactus are difficult to establish on their own roots, many collectors have given up trying to grow them. However, they can be quite easy should one follow a few simple rules: soil mix should contain about two parts of gritty sand to one part of potting soil, the plants prefer an acid pH, they like hot, humid conditions (a greenhouse is a must), a winter minimum temperature of not less than 8°C and frequent watering in the summer. Winter watering should be sparse, but frequent misting is desirable. Bottom heat of 34-40°C is essential for rooting imported specimens.

Propagation of these mainly solitary plants is difficult except by seed. Only D. boliviensis is "readily" caespitose and fortunately the offsets do root rather easily which makes it a very desirable plant in collections (this latter plant is also hardier than the others and will take outside San Diego conditions as long as it is protected from direct frost).

The usual common pests found on cacti in general are easily controlled with Cygon·2E.

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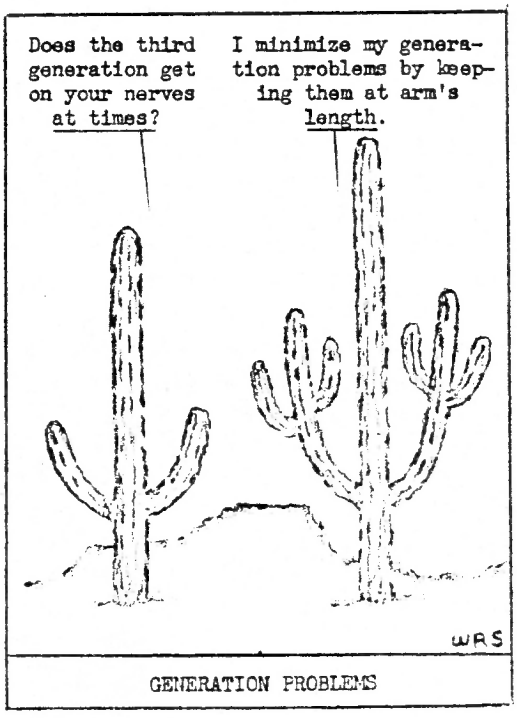
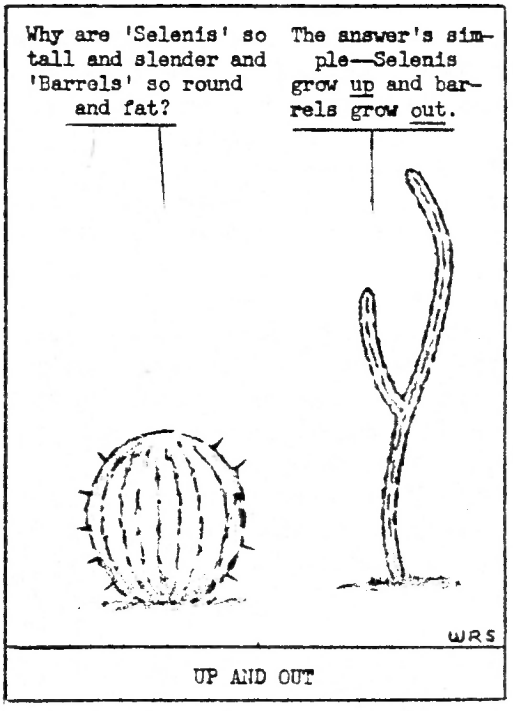


GENERATION PROBLEMS



UP AND OUT

Sedum multiceps, the 'Baby Joshua Tree' (summer dormant)

Succulent-of-the-Month

SEDUMS

by Rick Latimer

Most succulent genera of the Crassulaceae are largely restricted to relatively limited regions. For example, the Aeoniums are mostly from the Canary Islands, the genus *Adromischus* is restricted to the Cape of Good Hope region, and the Dudleyas to the Californias. The exception to this rule is the genus *Sedum*, whose diverse range is the most international of all the succulent genera. What is the reason? Are they the most primitive genus of the family? At any rate, there are over 500 species to choose from, including: *Sedum backebergia* (Peru), *S. guatemalense* (Guatemala), *S. oxypetalum*, *S. dendroideum (=S. praealtum)*, and *S. morganianum* (Mexico), *S. anomalum* (California), *S. moranii* (Oregon), *S. spectabile* (Korea), *S. lineare* and *S. sieboldii* (Japan), *S. borissovae* and *S. spurium* (USSR), *S. acre* and *S. dasyphyllum* (Europe), *S. multiceps* (Algeria), and *S. madagascarense* (Madagascar). There are two opinions on the meaning of the generic name: first, "to sit" from the Latin verb *sedo* or "to soothe (medicinal?)" from the Latin verb *sedare*.

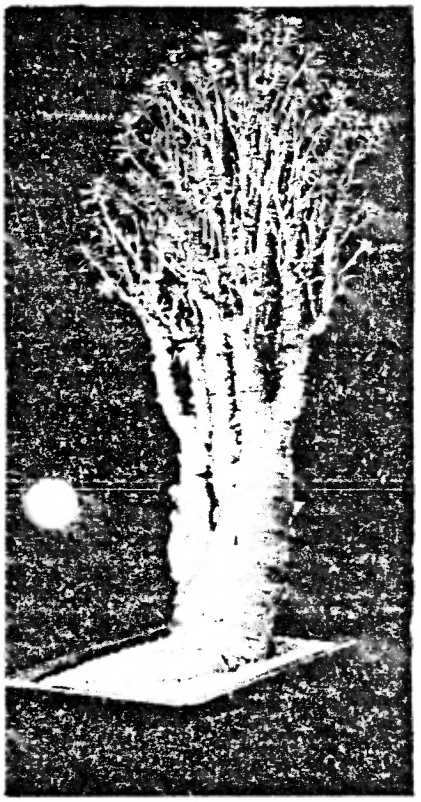
This largest genus of the Crassula family is difficult to separate on technical characteristics from some of the other genera. One might guess that the major source of confusion lies between *Sedum* and *Crassula*, since both have flat, 5-starred flowers (like the Jade Tree). All species of *Crassula* have leaves that are opposite, where some Sedums do, but some are alternate. But since Sedums are not generally associated with Africa, there seems to be little confusion if the native locality is known. The major source of confusion actually exists between the Sedums and the Echeverias! Generally, in the Echeverioideae, the petals are almost always united at the base and are mostly erect (forming typical Echeveria "lanterns"), the floral stem is axillary (as with Aloes), and the plants are relatively large. Contrast this with a typical member of the Sedioideae, the petals are mostly distinct and widespreading and thin, the floral stems are usually terminal (branches are monocarpic like Agaves), and the plants smaller and branching. So many typical Echeverias and Sedums exist giving the impression that there are definite genera, like Germany and France. However, there are some Mexican species, known as the Pachysedums, which include such plants as *S. hintonii*, *S. suaveolens*, *S. morganianum*, *S. cremnophila*, etc., that are transitional. Some splinter genera have been created: *Graptopetalum*, *Lenophyllum*, *Villadia*, *Thompsonella*, *Cremnophila*, etc. Some of these are valid, like Luxembourg, Belgium, and the Netherlands, but some are not, like Saar, Alsace, and Lorraine. The catch is that it is not so easy to determine which are valid, or even to say which are nearer to *Sedum* or to *Echeveria*. For now, I will include the problem species in *Sedum* or nearer to *Sedum* than *Echeveria*, including *Graptopetalum*, since it has flat flowers in an irregular spray and Sedum-like leaves. (This of course does not solve the problem.) Lest we forget, let us recall that the genus *Dudleya* has both flat and erect flowers!

Sedums range in size from the tiny mat-forming miniatures such as *S. moranii* and *S. dasyphyllum* to the winter-deciduous tree-like species from Mexico (*S. torulosum*, *S. frutescens* and *S. oxypetalum*). Hanging basket Sedums, such as *S. sieboldii* and *S. morganianum*, are always used at the County Fair, even by non-succulent growers. The last species (like *Senecio rowleyanus*)

Sedum craigii

has an undiscovered native habitat and has several other forms now, including *S. burrito*, "Giant", and "Super" burro tails. Potted plants may reach at least six feet long and are difficult to move. Foliage colors include: red-orange (*S. guatemalense*), brown (*S. stahlii*), red and sea-green (*S. "Aurora"*), purple (*S. album*), blue (*S. dasyphyllum* and *S. multiceps*), blue-green with red tips (*S. pachyphyllum*, also known as "Baby Toes"), green (*S. dendroideum*, which makes nice crests), and yellow-green (*S. confusum*). Flower colors range from white (*S. allantoides*) to yellow (*S. dendroideum*), pink, lavender, magenta (*S. spectabile*), and even reddish-brown (*S. morganianum*).

A remarkable new species from Topia, Mexico, is *S. suaveolens*, named for its sweetly fragrant flowers. The plant itself looks like *Echeveria elegans*. However, the flower stems are not the elegant pink swan heads of that Echeveria, but short, branching stems with clusters of white (mostly wide-open = transitional) flowers. An exciting fact about this plant is that it has 320 gametic chromosomes, the largest number known. Currently in second place is *Graptopetalum pachyphyllum* with 270.



Sedum frutescens

Tacitus bellus has the most beautiful flowers in the whole of the Crassulaceae. Their color is magenta-pink. Plants are beautiful too, being tidy, compact, flat, dark-green rosettes. Plants are native to Chihuahua.

The most popular Graptopetalum is sometimes called the "Ghost Cactus". My favorite plant of *G. paraguayense* is grown by the Loylands in a bark planter. Easy-to-grow *X Graptoveria* "Silver Star" has the hard-to-grow *Graptopetalum filiferum* as one of its parents.

Interesting Sedum off-shoots are not limited to Mexico, but occur also in Asia. Three interesting genera are *Sinocrassula*, from S. China and the Himalayas, and *Orostachys* and *Meterostachys*, from Japan, Korea, N. China and Mongolia. Plants of Orostachys ahve monocarpic rosettes, which in Autumn produce terminal spikes (sometimes axillary!), forming a white miniature Christmas tree on *O. japonicus*. All in all, a great deal of plant material exists to choose from in the Sedioideae.

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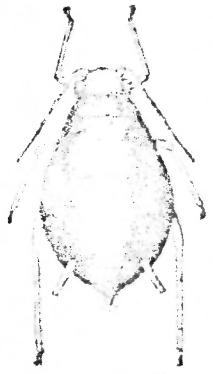
Pests of Succulent Plants

Part VII. Aphids. Dr. Ronald E. Monroe

Although aphids or plant lice are never found as a common pest on succulent plants, they can, on occasion, be found on any species growing either in the greenhouse or the garden. Usually in the spring of the year, small to medium-sized colonies may be found sucking the fluids from their adopted host plant causing minor to severe damage during the infestation.

Systematics—There are numerous species of aphids (Homoptera: Aphididae) that are normally found feeding on garden or greenhouse plants: rose aphid (Macrosiphum rosae), violet aphid (Micromyzus violae), bean aphid (Aphis fabae), columbine aphid (Hyalopterus trirhoda) and melon aphid (Aphis gossypii), etc. From time to time several of these species may attack succulent plants even though the latter is not the normal host.



Wingless adult female of the strawberry root aphid, *Aphis forbesi* Weed. Greatly magnified.

Plant damage—Invariably, aphids are found feeding on either the unopen flower buds or the fruits of cacti and other succulents. However, they have been seen to infest large areas of Echeveria sp., and Senecio rowleyanus is commonly attacked. Aphids feed by sucking the sap from the plant; therefore, damage caused is related to loss of plant fluids (wilting and stunted growth) and physiological damage apparently caused by salivary secretions (chlorotic spots, aborted flower buds or twisted, irregular growth). As they feed, the insects may take on different colors depending upon their host plant and the species of aphid: green, yellow, brownish or nearly black.

Biology—On the approach of cold weather, winged males and females are produced and after mating, the female will oviposit from one to four eggs in a sheltered place on the plant and then die. The eggs overwinter and small nymphs hatch the following Spring. They grow quickly but never obtain wings. Oddly, all of these aphids are females and they begin to produce more young (without mating) ovoviviparously. The young produced also grow up and produce more young in the exact same manner. After several generations, winged females are produced and these usually fly to another host (the same species of host or a new host; this is the time that succulent plants usually are attacked). After numerous generations, the male and female forms are again produced prior to winter weather (Metcalf et al., 1951). It is important to note that aphids attacking plants in a greenhouse continue producing female forms generation after generation and no males or overwintering eggs are ever produced (Metcalf et al., 1951).

Control—Aphids are extremely easy to control. If one finds a colony early, merely running the fingers over the buds, fruits, etc., will either crush them or knock them off the plant. A fine, directed jet of water will usually dislodge them, or one can spray with the conventional insecticides for sure control: Sevin, malathion or Cygon·2E (use as directed).

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Member Interviews: FLOYD GABLE

by Marcia Monroe

Floyd is originally from Springfield, Ohio, where he attended local schools and later majored in business administration at Wittenberg College. He has spent a short time in the Army, owned and worked for a nursery, and was a merchandising manager for Sears. During World War II he was a security officer for a California plant. Since the war he has worked in merchandising and is a retired manager in hardwares for Walker Scott. He has spent 15 years in San Diego and resides in Santee with his wife. They have one son who is a lawyer.

He has been collecting for 14 years, taking several extensive trips a year with Bob Taylor into Mexico and Baja California, bringing back numerous cactus and succulent species.

Floyd is a member of the Rare Plant Society and the Epiphyllum Society of San Diego. He is also a member of the Palomar Cactus and Succulent Society and has been an active member of the San Diego Cactus and Succulent Society for eleven years. Floyd is a past member of the Cactus and Succulent Society of America.

During his membership in our society, Floyd has held the following positions: vice-president, education chairman (writing articles), member of the board of directors, and show chairman for our show as well as the Del Mar Fair. He has won numerous blue ribbons and a gold ribbon for his Lithops at the Cactus and Succulent Society of America's Annual Show, and Floyd has won many ribbons at our local shows. Too, he has judged cacti and succulents at the Carlsbad Flower Show.

The children of the neighborhood call Floyd the "Cactus Man". This is quite apparent when visiting his front and back yard, which are neatly landscaped with many cacti and succulent plantings. Mesembs, crassulas, and euphorbias are Floyd's main interest, but he also collects orchids, echeverias, cacti, epiphyllums, stapeliads, and other succulents.

Floyd recommends a general mix for most of his plants, using a more porous mixture for such cacti as Mammillopsis senilis, and water when necessary during the growing season and every six weeks or so for the non-growing period. Mature plants that he has grown from seed indicate that Floyd has considerable horticultural experience in growing succulents.

Ed. note: This is the first in a series of articles by Marcia Monroe on members of the SDC&SS and a welcomed addition to our monthly bulletin.

SDC&SS 1980 Show

by Shirley Berry

It is not too early for members to be thinking about entries in the June (1980) annual cactus and succulent show sponsored by our club. A committee composed of Ron Monroe (chairman), Lee Phelps, and Shirley Berry, has been organized to improve our show and bring it closer in line with the annual CSSA show.

These new conditions will provide an opportunity for more members who perhaps have only one or two show plants, to have an equal chance with those who have a "table full". The proposed new rules will follow the classifications of the Cactus and Succulent Society of America's show held at the Los Angeles State and County Arboretum in Arcadia, California, each year. There will be 50 classes based on grouped genera, 25 for cacti and 25 for succulents. There will be an "A" and a "B" category: the "A's" for plants in pots over 6", the "B's" for plants in pots under 6".

The new rules are not meant to discourage large individual displays, but rather to encourage more membership participation for those with fewer choice plants to exhibit.

Our program for September will feature a discussion by Lee Phelps on a judge's viewpoint in looking at plants competitively. He will cover such topics as the meaning of staging a plant, condition of the plant, importance of top dressing, and cleanliness of the plant.

High point awards will be given for the different divisions and what those awards will be is still in the discussion stage. It is time right now to be grooming and coddling, pushing, feeding, cleaning, trimming and casting a cold objective eye on your collection and mentally making selections for our next show. If you have any suggestions for awards you might mention your ideas to one of the committee members mentioned above.

HUNTINGTON GARDENS' PLANT SALE

The Huntington Botanical Garden will hold its Fifth Annual Benefit Plant Sale from 9:00 a.m. to 4:00 p.m. on Sunday, September 30, 1979, at the Exhibition Building in The Pasadena Center, 300 East Green St., Pasadena, Calif. Free street parking is available, or convenient garage parking for $1.00 (enter garage from Euclid Avenue or Marengo Avenue).

A large selection of rare and choice succulents will be offered, as well as house plants, herbs, ornamental trees and shrubs, palms, etc. Profits will finance new garden projects at the Huntington, including a public conservatory for cacti and other succulents.

A pre-sale will be held for members of the Friends. For information about this supporting group, write to the Friends of the Huntington, 1151 Oxford Rd., San Marino, CA 91108.

SAN DIEGO BOTANICAL GARDEN FOUNDATION SHOW SCHEDULE

The San Diego Botanical Garden Foundation announces the following shows which are to be held in the Casa del Prado during the upcoming weeks:

September 15-16 — San Diego Bromeliad Society Show
September 22-23 — Exotic Plant Society Show
September 29-30 — San Diego Bonsai Society's Fall "mini" Show

SAN DIEGO ZOOLOGICAL SOCIETY EVENTS

The San Diego Zoological Society will host the following events in the upcoming weeks:

September 15-16 — Green Thumb Show — San Diego Wild Animal Park
October 6 — Annual Book Sale — San Diego Zoo
October 6-7 — Annual Flower Show and Plant Sale — San Diego Wild Animal Park

1980 CSSA ELECTIONS

The Cactus and Succulent Society of America, Inc. has announce the following slate of nominees for offices in the Society's upcoming election:

President — Kitty Sabo (CSSA Board Member)
Stan Oleson (active member of several societies)

Vice-President — Dr. Leroy Phelps (CSSA Board Member)

Secretary — Henrietta Royce (Incumbent)

Treasurer — Virginia Shambeau (Incumbent)

Directors (Vote for 3 — each Director serves a term of 4 years) —

Peter Sharp (CSSA Vice-President)
Dr. Ron Monroe (active member of the San Diego Society)
Sam Williams (Incumbent)
Joe Clements (Incumbent)

This year's ballot will be mailed in the September-October issue of the *Cactus and Succulent Journal*. All CSSA members are urged to carefully read their ballot and the other information included, and to VOTE!

NEW MEMBERS

We welcome this month the following new members:

Fred Del Cooer, San Diego
Kay Harry, La Jolla
Kansas City Cactus and Succulent Society (exchange)

NOTES & NEWS

Winners of the "Bragging Plant" competition for August were:

1st: Sylvia Kramer — *Fouquieria fasciculata*
2nd: Mike Burkhardt — *Calibanus hookeri*
3rd: John Pasek — *Euphorbia decaryi*

Additionally, we failed to report the winners of the competition for May, who were:

1st: Martin Mooney
2nd: Floyd Gable
3rd: John Pasek

A reminder that the following members have signed up to provide refreshments at the September meeting:

Peg Bryant, Peg Foret, Jean Hapeman, Henrietta Jensen, Nellie Kennett, Perlso Lewis, Wally Musser, Mary Thompson, and Mariann Thrombley.

Marcia Monroe exhibited an outstanding collection of Stapeliads at August's V.I.P. Table. September's table will feature a display of cacti by Frank Thrombley.

In reporting, in the last issue, on the winning entries of SDC&SS members at the Cactus and Succulent Society of America's 14th Annual Show, we missed a name. Clinton Crowe also won an award for an Opuntia.

Activities Chairman Warren Buckner is attempting to organize a car trip down the length of Baja California, to observe and photograph the native cacti and succulents of the peninsula, for sometime in October. Current plans are to stay at El Presidente Hotels along the route. If you would be interested in such an excursion, or would like more details, please contact Warren (at 469-1391) soon, as a trip of this type takes a considerable amount of planning.

Plant Sales Chairman Carl McLeod, escorted by three of his elves, recently traveled to Howard Wise's Nursery in San Bernardino, where they went bananas and attempted to buy Howard out (don't worry, they only succeeded in making a dent in Howard's stock). As a result, some choice selections of cacti will be available at the September meeting, including such rarities as *Uebelmannia pectinifera*, and the very rare *Echinocereus lindsayii*, as well as generous selections of Copiapoas, Mammillarias, Melocacti, Discocacti, etc. So come early and bring the checkbook!

Deadline for the October issue is September 24th.

Jim Dice
6066 Portobelo Court
San Diego, CA 92124

Address Correction Requested

San Diego Cactus & Succulent Society

Officers

President - Tom Hamecher 440-6245
996 Terrace Crest, El Cajon, Ca. 92020

1st V. Pres. - Richard Latimer 463-1655
5990 Lake Murray Blvd., La Mesa, Ca. 92041

2nd V. Pres. - Carl McLeod 279-2817
3516 Mt. Everest, San Diego, Ca. 92111

Recording Secretary - Beverly Kirkegaard 463-2801
10009 Bonnie Vista, La Mesa, Ca. 92041

Treasurer - Joan Johnson 728-7317
3560 Lake Garden Dr., Fallbrook, Ca. 92028

Corresponding Secretary - Amna Cornett 291-6426
3905 Ibis St., San Diego, Ca. 92103

Immediate Past Pres. - H. Warren Buckner 469-1391
1744 Englewood Dr., Lemon Grove, Ca. 92045

Board of Directors

Shirley Berry, Perlso Lewis, Dr. Ronald Monroe,
Martin Mooney, John Pasek, Dr. Leroy Phelps

Committees

Activities: H. Warren Buckner
Audit:
Conservation: Dr. Ronald Monroe
Education:
Cacti - Dr. Ronald Monroe
Succulents - Richard Latimer and Dr. Leroy Phelps
Exhibits:
Bragging Table - Shirley Berry
V.I.P. (Very Important Plants) Table - Martin Mooney
Historian: Richard Latimer
Library: Elizabeth Athy
Membership: Joan Johnson
Open House: Floyd Gable
Plant Exchange Table: Ethel Standish and Doris Rake
Plants & Supplies Table: Carl McLeod
Programs: Richard Latimer
Publication: Jim Dice (ph. 278-0326 or 276-2589)
Reception: Perlso Lewis and Veryl Snowhill
Regalement: Nancy Roth
Representatives:
Balboa Park Desert Garden -
Quail Botanical Gardens - Audrey Johnson
S.D. Botanical Garden Foundation -
S.D. Floral Association - Verna Pasek

The San Diego Cactus & Succulent Society is open to all persons interested in growing cacti, other succulents, and exotic plants. Meetings are held the second Saturday of each month at 1:30 pm in Room 101, Casa del Prado, Balboa Park. Board of Directors meetings are held after the general meetings. Annual dues are $6.00 per family. Single copies of *Espinas Flores* are 50¢.