

MAMMILLARIA THORNERI

Espinas y Flores

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

A Non-Profit Public Benefit California Corporation

VOLUME XXXIII NUMBER TWO, SATURDAY, ♥ FEBRUARY 14, 1998 @ 1:00PM



EDITHCOLEA GRANDIS

February Program:

Duke Benadom - Namaqualand 1996

Many of you are already familiar with Duke Benadom. Although he resides in Simi Valley north of Los Angeles he has been a member of the San Diego Cactus & Succulent Society for many years. He always attends our June Show, photographing the trophy winners and other special plants and exhibits. And, if we are lucky, some of these photographs along with a description of the plant show up in his column *Cactus and Succulents for the Amateur* which appears in each edition of the CSSA Journal. Duke has been actively involved with several cactus & succulent societies throughout Southern California and presently serves as vice-president of the CSSA.

With two exploration trips photographing and researching rare succulents in southern Africa, Duke's enthusiasm for these living treasures is infectious and dynamic. Dr. Larry Mitich, president of the CSSA, quotes Duke (and wife, Kazuko) in the November/December 1997 issue of the CSSA Journal in the article entitled *The Benadoms and Hannas Receive Superior Service Awards*: "We did not get into this hobby for recognition," explains Duke, "we got into it for the education (both gleaned and disseminated), all of the fascinating events, and the camaraderie of an extremely interesting group of people. It is for these same reasons that we intend to continue what we love doing."

Our cover: This beautiful pen and ink drawing of the remarkable flowers of *Edithcolea grandis* was published in the CSSA Journal - Volume 60, July/August 1988. Charles Glass and Bob Foster, editors of the journal at that time wrote, "Few flowers are as elegant as those of *Edithcolea grandis* N. E. Brown, a succulent Asclepiadaceae or "milkweed" from Socotra, Somalia, and Kenya in eastern Africa. These flowers are large, about four inches in diameter, with rich hues of reddish brown and an intricate pattern which have earned in the nickname of "Persian Carpet." The thorny-stemmed plant with flower and bud is depicted here in this beautiful pen and ink rendering by Robert W. (Bill) Barnett of San Francisco, California."

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



MICHAEL & JOYCE BUCKNER, EDITORS
4822 SANTA MONICA AVENUE, #103
SAN DIEGO, CA 92107
PHONE OR FAX: (619) 222-3216

PUBLICATION DEADLINE FOR MARCH IS SATURDAY, FEBRUARY 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 350 issues going to members (*one issue per household*) and an additional 40-50 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.



February 9 - Deborah Burt, Parent Advisor to The Healing Environment Garden, San Diego Children's Hospital. The San Diego Horticultural Society meets @ 6:30pm on the second Monday of each month at the Del Mar Fairgrounds- Satellite Wagering Facility. For more information please call (760) 630-7307.

February 28: The Palomar Cactus & Succulent Society presents Dr. Park Nobel, noted cactus researcher and UCLA Professor of Botany, will speak on his work of many years on desert plant physiology. Dr. Nobel co-authored **The Cactus Primer**. This is a not-to-be-missed event for the serious cactophile. Meeting begins @ noon, Joslyn Senior Center, 724 North Broadway, Escondido. Additionally Reese Brown will delve into the **Euphorbia milli complex**, sorting out and explaining this wide and varied group. For additional information on the Palomar C&SS please contact **Stan Yalof @ (760) 743-1560** or **Paul Steward @ (619)486-0535**.

February 27 - March 2: The Second Southwestern Cactus & Succulent Conference in Miami, Florida; sponsored by the South Florida C&SS; held @ Holiday Inn, Miami International Airport North (305)885-1941. For more information contact Susann Boisvert, P.O.Box 161407, Miami, FL 33116.

March 9 - Mike Evans, Tree of Life Nursery - Native Plants; San Diego Horticultural Society meeting @ 6:30pm, Del Mar Fairgrounds- Satellite Wagering Facility. For more information please call (760) 630-7307.

April 11 - 12: Southcoast Annual Cactus & Succulent Show & Sale - 9:00 am through 4:30 pm at the Southcoast Botanic Gardens, 26300 Crenshaw Blvd., Palos Verdes Peninsula; for more info (310)832-2262.

April 24 - 27: The Desert Research Symposium sponsored by San Bernardino County Museum - Redlands, CA. Mojave Desert Field Trip, Symposium Social, Abstracts of Proceedings, etc. Contact: Jennifer Reynolds, 777 E. Rialto Avenue, San Bernardino, CA 92415-0763; (909)387-2582; fax (909)387-2052.

May 10 - Annual Epiphyllum Show & Sale Room 101, Casa del Prado - Balboa Park, San Diego.

June 6 -7: San Diego Cactus & Succulent Society Show & Sale - Casa del Prado - Balboa Park, San Diego
This is an open show! Come One! Come All! And a terrific sale. Show set-up all day Friday, June 5 and early morning Saturday, June 6. This is gonna be our biggest show ever!! For more information: (619)462-1805.

June 12 - 14: Mid-West Cactus & Succulent Conference hosted by the Omaha Cactus & Succulent Society @ the Ramada Inn (712)328-3881 in Council Bluffs, IA. Speakers: Bruce Bayer, Fred Katterman, Steven Hammer, Rob Wallace, Miles Anderson, Dr. Jerry Barad, and Chuck Hanson. Contact: Roger & Nancy Brown, P.O.Box 220, Waterloo, NE 68069; (402)779-3416 - e-mail address: Spinekeeper@aol.com .

June 20: Bruce Bayer, world renowned expert on the genus Haworthia from South Africa @ Noon at the Joslyn Senior Center, 724 North Broadway, Escondido. This very special event will be co-sponsored by the SDC&SS. Anyone and everyone with any interest in Haworthias should plan to attend this rare opportunity with a world-class botanical explorer and taxonomist.

July 11 - 12: CSSA Show & Sale, Huntington Botanical Garden - San Marino. Note the date change — away from the 4th of July holiday — attendance and participation should be up!

July 25 - 26: Nor-Cal Cactus & Succulent Association Show & Sale - San Francisco County Fair Building at Ninth Avenue & Lincoln Way in Golden Gate Park, San Francisco; info: (415)665-8101.

August 22 - 23: Inter-City Cactus & Succulent Show & Sale @ the L.A. Arboretum, Arcadia. And perhaps a SDC&SS Bus Trip/Field Trip is in order for this very special event!

October 23 - 25: Sonoran 2 - A Cactus & Succulent Conference - Seminar - Symposium in Tucson - Call it what you will, but it will be a super get-together for cactophiles to exchange their knowledge and, above all, have fun. For more information regarding this terrific event contact: **Carol Clapp**, P.O.Box 91560, Tucson, AZ 85752-1560; phone (520)908-9001 or e-mail://mvw.desertcactus.com/tcss/ or kitfox@azstarnet.com .

Thank you **Steven Hammer** for judging our Winter Mini Show. Steven remembers giving ribbons to the following plants & owners: **Cathryn Mangold's *Phyllobolus herbertii* X *tenuiflorus***, **Beverly Kirkegaard's *Othonna cacalioides***, **Dylan Hannon's *Othonna affinity rosea***, **Tom Birt's *Monilaria pisiformis***, **Dylan Hannon's *Massonia echinata*** and **Dick & Lupe Hulett's *We don't know!!***. Well, we are still missing the names of two plants and one owner - hopefully the proud owner will come forward so that we can print up a further acknowledgement in the March issue.

Desperately Seeking Saguaro: Earl Kemp, an old-timer cactus fancier, is now retired and living in Mohave County, Arizona where he is in the process of establishing a specimen garden/breeding farm. He has sent out an urgent plea. He desperately wants contact with collectors generous enough to contribute a legal Saguaro and a legal Joshua Tree for this new project. In fact, he has asked for seeds, clippings, cuttings, debris, and any orphan specimen plants you may wish to part with. Anyone wishing to help in this worth-while project can phone him @ (520)565-3941 (no answering machine, please keep trying) or write to P.O.Box 6642, Kingman, AZ 86402-6642. He offers digging and transporting help along with unending appreciation and thanks. . . . We miss ya, Earl!

HELP!! YOUR DONATIONS OF "HEN & CHICKS" (*Echeveria elegans?* or whatever they're called !) are needed to help LANDSCAPE THE NEW KATE SESSIONS STATUE IN BALBOA PARK. If you have some plants you would like to donate please bring them with you to the February meeting or please contact: **Kay Quijada @ (619)282-5919.** These donations are needed before the end of February, as they will be landscaping in March for the April 1st Opening Ceremony. Thanks!!

Free to a Loving Home: Specimen Euphorbia (probably *Euphorbia Ingens*, but we're not sure!), potted, approximately seven feet tall and 18 inches wide. Located in the Chula Vista / National City area. Please contact Dee Vawter @ (619) 479-7687.

Guide to Birds of the Anza-Borrego Desert by Barbara W. Massey has recently been published by the Anza-Borrego Desert Natural History Association in time for both the desert wildflowers and the spring migration. This 305-page publication now ranks as one of the most comprehensive guides to bird watching in the desert region of eastern San Diego County, including the Anza-Borrego Desert State Park and the surrounding area. In addition, there are species accounts for all birds documented in the Anza-Borrego Desert for the past decade, a list of all species documented in the region, by site and season, and charts of species of special interest to the desert birder. The fifteen illustrations are the work of Narca Moore-Craig. This guide can be purchased from the ABDNHA for \$21.00 (17.95 plus tax & shipping), P.O.Box 310, Borrego Springs, CA 92004-0310; (760)767-3052; fax (760)767-3099; e-mail orders to abdnha@aol.com .

Did you notice that **Virginia Innis**, the editors, and the **Espinosa y Flores** were all mentioned in an article titled **TEQUILA SUNRISE** in the January 22nd issue of The Reader? The author, Bob Owens, contacted us in November just as we were putting together the December issue. He wanted to know if an agave was a cactus. . . . we set him straight about that and sent him our December issue, which had much to say about agave and tequila, too! Now, we've had a call from Bob Emmons who is considered quote "The Tequila Guru of the World" unquote. He has authored the book, **TEQUILA**, the ultimate source for tequila information - Open Court Publishing - available at Barnes & Noble Booksellers.

Michael Buckner @ (619)222-3216 is planning some **FIELD TRIPS** for this year and has tentatively arranged for an April/May Wildflower Tour to the Anza-Borrego. Other destinations for 1998 SDC&SS Field Trips under consideration: LotusLand - perhaps in late summer or early fall, The CSSA Show & Sale @ the Huntington Botanical Gardens in July, and The Inter-City Show & Sale @ the L.A.Arboetum in August. There will be sign-up sheets for those interested at the February meeting. And we are interested in your suggestions and feedback. Price will vary — approximately \$20 to \$30 per person — more for LotusLand. Enthused? We are! The Field Trips we have done in the past have been a heck-of-a-lot of FUN!!!

Thank You Everyone for all the nice compliments and comments on last month's article **A Baja Thanksgiving!** It was a labor of love and I am proud to have shared it with all of you. Needless to say I was thoroughly thrilled when I received a note from **Dr. Herman Schwartz of Strawberry Press.** He says:

"Great article on your Baja trip. Brings back memories of my first trip when I saw a Boojum. My eternal ambivalence books or trips. It is never resolved. Currently finished **MADAGASCAR II** (at printers) and **History of Succulents** by Rowley - FABULOUS!"

Yes, Herman! We agree — **The History of Succulents** is fabulous! We just got our copy (from **Rainbow Gardens Bookshop**) about two weeks ago — and even I am reading it! **Thanks again, Joyce Buckner**

About Our Mini-Winter Show - 1998:

This past January 10th our club held an event that was meant to attract large numbers of succulent collectors and plant enthusiasts. Now that the dust has settled we have to agree it was a great success. The first annual Winter Show & Sale featured seventeen vendors of the 23 invited. Although I myself took the booby prize in sales, the other exotic plant and/or container sellers shared amply in the almost \$4,000 taken in mostly in the five hours prior to Steven Hammer's presentation. It is very important to acknowledge these SDC&SS members/ vendors /artists who take the time and energy to carry in their sales plants, ceramics, artwork, etc. as 25% of all their sales is contributed directly to the society. This is the kind of subsidy that makes it possible for our organization to afford world renowned speakers, maintain an excellent library and put out a quality newsletter, among other things.

The fact that it rained several times that stormy Saturday makes our success all the more remarkable. As is the fact that 23 members showed nearly 200 plants. Steven Hammer began his speech by heaping accolades on ten of these cute puppies. I have to say that his presentation was the most stimulating we have seen in some time.

We were not perfect by any means. The sales area was too small and the show area too spread out. We can adjust this, if necessary, next year. All day long people came up and thanked me for a job well done. Actually, I did very little myself, but would like to thank the following people who helped in various ways: **Tom Knapik** whose conception of the event was followed by his zeal during set-up; **Joey Betzler** for his computer expertise, advertising and sweep up at the end; **George Plaisted** our Casa del Prado man with all the connections — his knowledge of the hall and the way things worked was invaluable — George was able to supply us with extra tables, barriers to separate the show area from the sales area and even with small boxes for plant sales — we would have been lost without him!; **Herb Stern** for keeping us in a straight line; **Stan Yalof** for waiting in line for the sales tax forms; **Tom Birt** for setting up **Betty Athy's** cash register and organizing the cashiers; and a very special thanks to **Michelle Heckathorn** and **Jeff Harris** who spent the entire day ringing up customers; **Pam Badger** for putting together a great lunch; **Tom DeMerritt** who lead a crew of recruits all day, doing whatever wherever to help out — among this helpers were **Erika Edwards, Laura DeMerritt, Brent McCowen, John Williams, Rudy Lime, Sara Schell, Ed Nolan, Sandy Frost, Lee Badger, and Stefy Mangold.** Finally our best example of the ideal member: **Steven Hammer** who struck a triple blow — selling, showing, and speaking!

Many thanks to all who participated!

Sign me your proud Mini-Winter Show Chairman,

Ed DeLollis

CACTUS OF THE MONTH

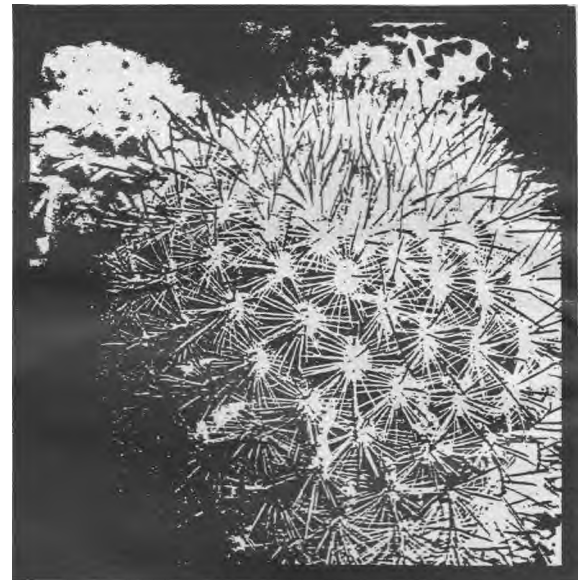
PEDIOCACTUS & SCLEROCACTUS

BY RIC NEWCOMER

Would you like a challenge? Then turn your interest to this month's cactus --- *Pedios* and *Scleros*, as they are referred to.

Marilyn and I have had the pleasure of seeing these wonderful plants growing in their native environment. Just a hint here — don't even think about digging them up and bringing them into your collection --- "you will lose them". Instead, start with seed or get seedlings. There are several growers that you can purchase them from. Besides, these wonderful little plants are endangered, and we are losing too many to over-grazing, roads and pests. These plants grow in Arizona, Colorado, Idaho, Nevada, New Mexico, Oregon, Montana, Washington, Wyoming, Utah and California.

Pedio, which comes from a Greek word meaning "small", describes these little plants better than any other term. They are small, they clump, and they have beautiful flowers. They can be found growing among grama grass, buffalo grass and stiff grasses. You can find them at high altitudes, at the foot of pines, under desert shrubs (sagebrush and greasewood), on lava beds, in gypsum soils and limestone, as well as fine red rock to almost white sand to heavy loams. They are seen on high slopes to open prairies and deserts. The best time for visiting these plants would be the end of April to the end of May, which is the flowering season. This is the time to find these otherwise camouflaged plants, since their magnificent flowers make them visible.

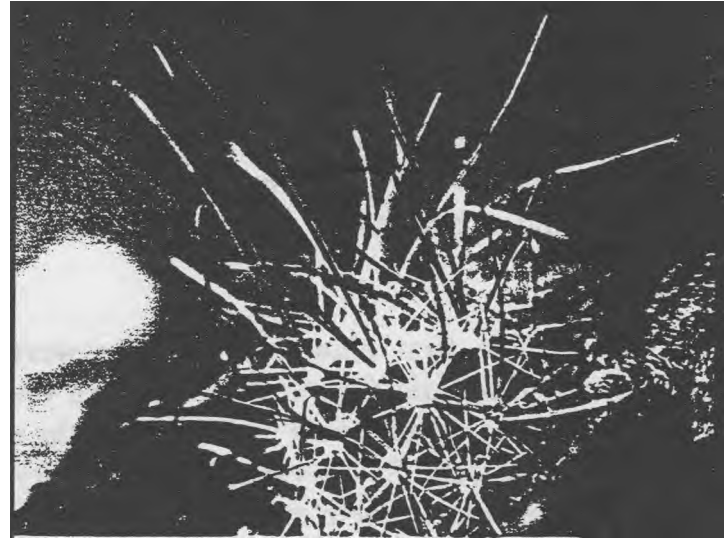


Sclero comes from the Greek word meaning dry, hard, parched. *Sclerocactus* with their wonderful and colorful tangled spination are a natural work of art. All colonies are highly endangered and many have already been wiped out by man and pests.

Sclerocactus come from the dry high deserts on the mesa high in the mountains, among the dominant desert shrubs on stoney rockscapes, in limestone and granite rubble and in red or grey fine sand. The plants grow in small colonies widely scattered in dry high deserts, where they produce a fascinating, multicolored flower display. It is logical to point out that further populations exist of both *Pedeocactus* and *Sclerocactus* which remain as yet undiscovered --- only because much of the region is so rocky and remote that it is only accessible by several very strenuous days journey on foot. I know of one such place right here close to home in the Baghdad area and another in the Cochise mountains in Arizona. Both are very safe from man, but not from pests. Beatles have been cutting down the old plants.

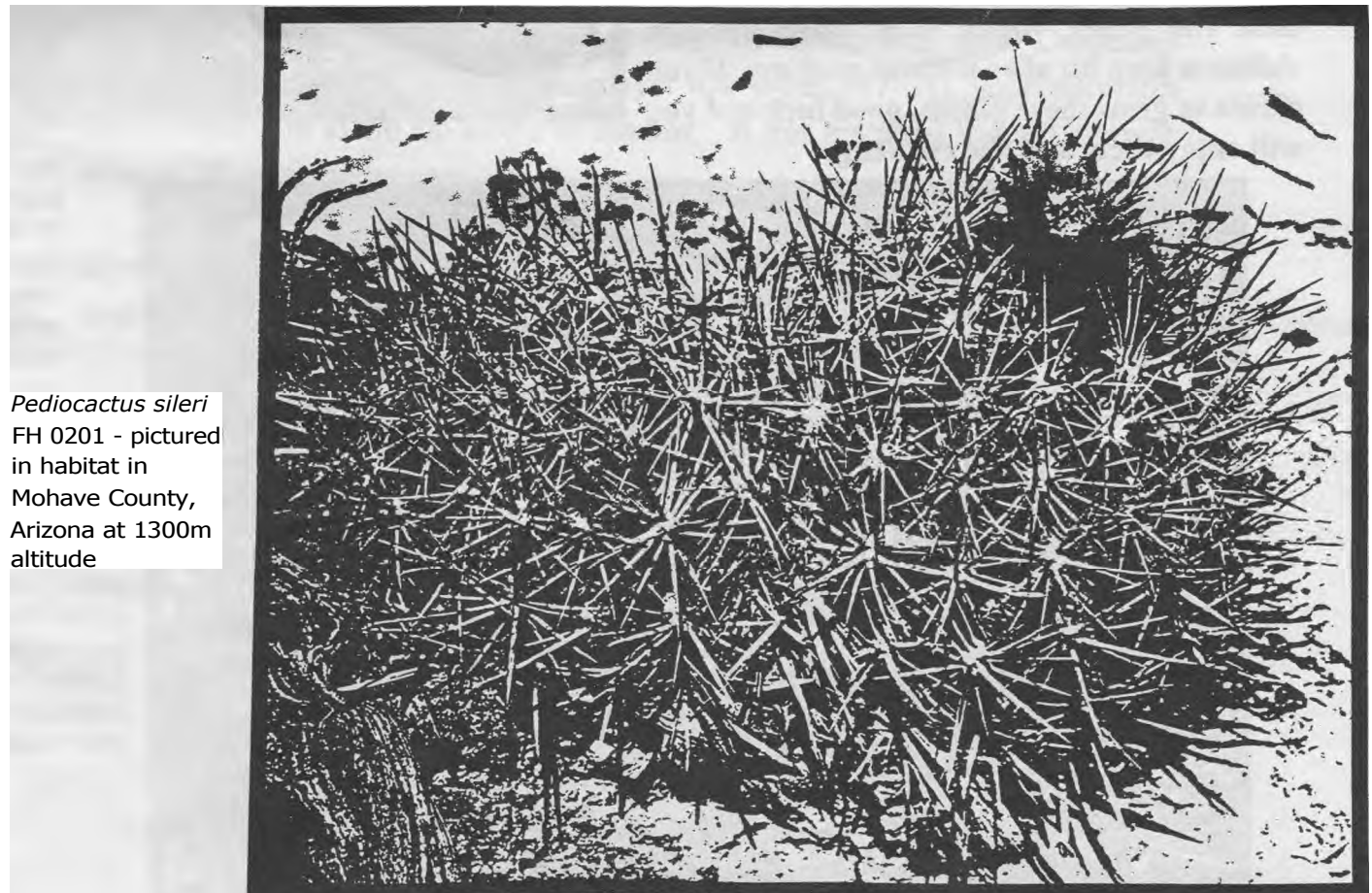
The life-cycle of the *Pediocactus* and *Sclerocactus* is quite fascinating. In spring there begins the slow rise in temperature. In April, as the days become increasingly warm, the plants produce their buds and they increase in size, even though there are still frosts at night. The first rain falls in mid-April, and shortly thereafter the buds, now fully developed, open. The flowers are pollinated by bees, wasps and flies. The plant also takes up water. There follows a short phase of growth, with the development of new spines in the crown. At this time, also the seeds ripen and the fruits dehisce. The period of maturity is relatively short, but it does vary from species to species. In *Pediocactus bradyi*, for example, the fruits ripen earlier. In *Sclerocactus terraecanyonae*, later. When the temperatures climb higher in June, the resting period begins.

Page 7



flu 105 *Sclerocactus blanet*, Nye Co., Nevada

Many *Pediocacti* set buds again as early as late autumn. The plants shrivel, some withdraw down into the soil and can no longer be seen. Despite the production of large numbers of seeds, only very few germinate in the wild. Nevertheless the viability of the seeds is retained for some years.



Pediocactus sileri
FH 0201 - pictured
in habitat in
Mohave County,
Arizona at 1300m
altitude

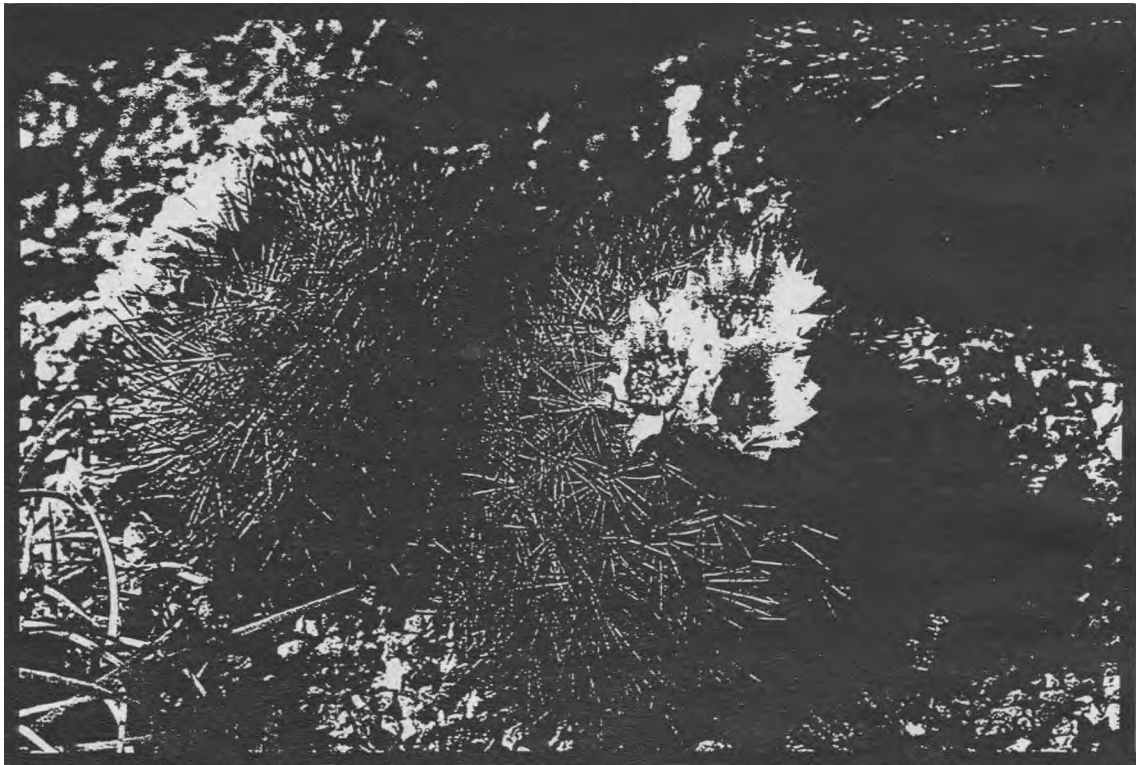
Pediocactus and Sclerocactus, Cont'd.

I have been interested in *Pedios* and since 1990 when I saw my first one in Moab, Utah with Marilyn on our honeymoon. I regret that all we saw had beetle damage, but I knew they were beautiful and that someday I wanted to collect them. My first plants came from Miles Anderson in Tucson and later I acquired several more from Steven Brack, Jim Boehmke, and much information from Rob Skillin.

The first plants from Miles were all grafted and did very well. After two years I took them off the graft and they, for the most part, did well. Seven years later and they are still growing on their own roots. All the other growers I acquired plants from do not graft as a rule, so all that I received from Steven and Jim were small to very small seedlings on their own roots. My loss was about 5%, so as of today I have 43 plants in my collection of *Pedios* and *Scleros*. Through trial and error I may have learned how to keep them alive more than two years, which is all John Pilbeam claims to keep his alive without grafting. If you decide to grow these plants, good luck and you, tu will enjoy them and the challenge.



*Pediocactus
bradyi* ssp. *bradyi*.
FH 055 - in
habitat in the
Lees Ferry region
of Arizona at an
altitude of 1000m



*Pediocactus
simpsonii* var.
minor growing
nearly 11,000ft
altitude on the
Sandia Crest nE
Albuquerque,
New Mexico

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.

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

NAME (S) - _____

ADDRESS: _____

CITY, STATE, COUNTRY & ZIP+r _____

PHONE/FAX/E-MAIL _____

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 0 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

SEND THIS FORM TO:
SDCSS - Treasurer/Membership, P. O. Box 33181, San Diego, CA 92163-3181

HAWORTHIAS & GASTERIAS



Specialists in rare, seldom offered haworthias & gasterias. Descriptive catalog \$1.00 deductible first order. Foreign customers send three (3) International Response Coupons.

BURKS' NURSERY

Phone: (501) 794-3266
P.O. Box 1207
Benton, AR 72018-1207 U.S.A.

CACTUS BOOKS

Send for FREE 29-page catalog featuring 460+ books/items on cacti, succulents. palms. cycads. bromeliads. hoyas, epiphyllums. South African, desert. more. Largest cactus bookshop in the world!

Sent surface mail anywhere in the world!

RAINBOW GARDENS BOOKSHOP

1444 E. Taylor St.
Phone (760) 758-4290

Vista, CA
92084
- visa/mc welcome

4t.4***4us-AL)s-*A-*AAAt*)o.4t*-A-A-*AA*AtAt-**A.At.****

Support your Society, by supporting our advertisers!

Tell them you read it in ESPINAS Y ROUSH



iNwroPUTTERra,fiv, SALE

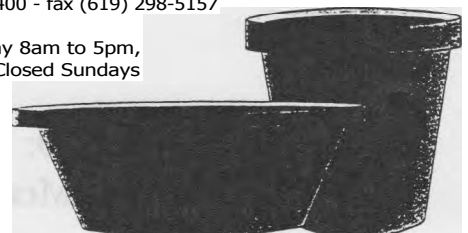
**CLIP THIS COUPON
for 10% OFF DISCOUNTED
ORANGE SALE PRICE of
40% off Retail Price!!**

Expires December 31, 1998

* A New Shipment of 50,000 Bonsai Pots Has Just Arrived *

LOCATION: In Mission Valley - from Hwy 163 take Friars Road East - one block to first traffic light and turn left on Frazee Road Go two blocks and look for warehouse on the left.
1544 Frazee Road, San Diego, CA 92108
phone (619) 298-5400 - fax (619) 298-5157

HOURS: Monday - Friday 8am to 5pm,
Saturday 9am to 5pm, Closed Sundays



C.O.D. Sales Only - \$100 Maximum Discount
One Coupon per Customer - instock Only - No Other Discounts A10011"



OFFICERS
Founder
Ruth C. Smith
President
Mary Vaughn
P.O. Box 80878
San Diego, CA 92138
1619) 234-9856
Vice President
Mr. Ted Gagett
Secretary
Mrs. Della Casady
Treasurer
Michiko Munda

Ecology • Education • Environment

A Non-Profit Corporation • Organized 1955

November 8, 1997

San Diego Cactus and Succulent Society
P.O. Box 33181
San Diego, CA 92163-3181

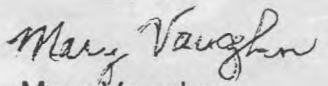
ATTN: Mr. Herb Stern

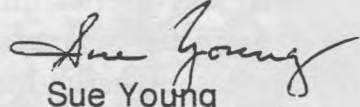
Dear Friends:

On behalf of City Beautiful, Inc. and the Kate Sessions Sculpture Committee we want to thank you for your generous contribution of \$150.00 to the Kate Sessions Sculpture Fund. Because City Beautiful, Inc. is a California 501(c)(3) non-profit corporation (taxpayer ID# LA-EO-77-81), your donation is tax deductible to the full extent of the law. In this instance the full amount of your gift is tax deductible.

Again, thank you for joining us in our efforts to honor a remarkable woman and her enduring legacy in Balboa Park.

Sincerely,


Mary Vaughn
President
City Beautiful of
San Diego, Inc.


Sue Young
Treasurer
Kate Sessions
Sculpture Committee

SUCCULENT OF THE MONTH: "CAUDICOTILLO"

BY TOM BIRT

The purpose of this article is to begin describing the plant family *Fouquieriaceae*. Not as a whole, but on a species (or group of species) by species basis. The first being *Fouquieria fasciculata*.

I have dubbed this species as "*caudicotillo*" on the basis that it is the most overtly caudiciform member of the ocotillo family. The vernacular name for it is "*Arbol de Barril*". It was first named *Cantua fasciculata* by Roemer and Schultes in 1819. Kunth proposed to name it *Fouquieria spinosa* (1820), but it was published as *Bronnia spinosa* in 1823, and received its current name by Nash in 1903, one hundred years after its original collection from "Puente de Madre de Dios" (in Hidalgo) by Humboldt and Bonpland.

A good description of its size and preferred habitat can be found in Charles Glass' and Bob Foster's MEXICO LOGBOOK:

"We drove back a few miles and on the slopes by the road found four species of *Mammillaria* growing together! *Mammillaria wildii*, *Mammillaria geminispina*, *Mammillaria sempervivi*, and *Mammillaria longimamma*. There were also nice *burseras* in the area. We got back to the Metztitlan road and followed it north along the base of the slopes on the east side of the surprisingly lush valley. The valley floor is cultivated - even bananas - and the cacti are restricted to the steep slopes. After all the years of collectors visiting this cactus wonderland, there are still dense forests of *Cephalocereus senilis* and innumerable plants of *Mammillaria geminispina*, *Astrophytum ornatum*, *Coryphantha erecta*, *Gymnocactus horripilis*, *Ferocactus glaucescens*, etc., etc. The main object of our visit, other than to see this fantastic place again, was to search for the rare *Fouquieria fasciculata*, the type species of the genus. Professor Matuda had found this species here, and we had read his article in the Mexican Cactus Journal and had seen a plant at the botanical garden at the University of Mexico. For all that we knew the plant was a small, inconspicuous shrub with a large swollen caudex. We cautiously climbed the precarious slope of rubble at the base of the cliffs by the Laguna de Metztitlan. It was a rather eerie place, the giant, absolutely perpendicular cliffs draped with Spanish moss that stirred like ripped sheets in the faint breeze. The sun was low in the sky, and we were becoming a bit desperate at the thought of not having enough time to find our plant. Carefully watching our footing as we bent over and peered under bushes for the fouquieria. We noticed only *Echeveria sanchez-mejoradae*, *E. coccinea*, *Pachyphytum longifolium* and small *mammillarias*. Charlie happened to look up and with breathless awe in his voice cried out, "Bob, look above you!". Bob mistaking awe for terror, and petrified, nearly fell off the mountain side. It sounded as if he were about to be hit by an avalanche, a mountain lion, or who knows what. There above his head was a giant plant — *Fouquieria fasciculata*, not a small shrub, but a monstrous tree, its branches laden with moss. We were completely unprepared for such a fantastic plant! We looked around, and on all sides [were] these awe-inspiring trees, with their great, green and gray, swollen trunks. We noticed that below us the farm hands had gathered around to see if we were going to fall or not . . . we couldn't have cared less at this point! In our elation we could have floated back down to level ground!"

Myron Kinnach (pers. corn.) has stated that he has rooted young shoots (ca. 4-6 inches long) in water rather easily. He states that is important to make these cuttings before they become woody. He confirms that a caudex does form (*F. purpusii*), and that they now have five foot high specimens in the Huntington Desert Gardens with nice normal looking caudices, like miniature idrias. These were started this way 20 years ago. As to the self-compatibility of *Fouquieria fasciculata*, Henrickson does state that Grant (1958) reports that *Fouquieria splendens* ssp. *splendens* has that ability. He goes on to state that there is evidence that *Fouquieria macdougalii*, *Fouquieria diguetii*, *Fouquieria columnaris* apparently share this ability, as isolated cultivated plants set seed. Though I have had one of my own plants bloom, seed was not produced. I look forward to hearing of other's success with seed and cuttings.

The flowers are described as being ivory white, have a delicate sweet fragrance, and produce noticeable nectar. The flowers are visited by hummingbirds, large bumble-bees, and an assortment of other insects which crawl over the corymbose inflorescence.

This caudicotillo's closest relative is undoubtedly *Fouquieria purpusii* from southeastern Puebla.

References:

Henrickson, J., Aliso, p. 439-537. 1972.

Glass, C., Foster, R., Cactus and Succulent Journal, p. 144-146. 1971.



Fouquieria purpusii bonsai; from the collection of Rudy Lime.

An old specimen of *Fouquieria purpusii* in habitat.

DESERT RESTORATION CLASS: March 27-29, 1998

Practical conservation after human use. What works, what doesn't.

A weekend course in reclamation of Mojave Desert habitat (after mining & other use) is again offered for early spring 1998 at the Desert Studies Center in the Mojave Desert (just south of Baker on Zyzzx Rd.). Last year three cactophiles from Southern California attended this course, one for credit. It was a wonderful experience. (For testimonials ask Long Beach Cactus Club, Orange Cty. C&S Soc., & San Gabriel Valley C&S Soc. members Frank DePew, Joe Stead, & Carol Wujcik.)

The course this year will be presented by Mike Eichelberger, Ph.D. (Toxicology/Molecular Biology from Utah State U., M.A. in Biology from Humboldt State U., & B.S. in Botany), a naturalist with a special interest in photography (and microscopy!). Dr. Eichelberger has been revegetation ecologist with the Viceroy Castle Mountain Mine since July, 1997, following Ray Franson. The class has been reworked, & will have an orientation on plant physiology and how it relates to revegetation/restoration. This year they'll eliminate the "hard labor" portion of the mine visit (students trying their hand at actual restoration work at the mine). Instead there will be more tours while at the mine with discussions of reclamation techniques. Presentations will give supporting information, such as adaptations and survival strategies of desert plants.

Friday night begins the introduction to desert revegetation ("Why Reclamation/Restoration?"), and Saturday everyone travels to the gold mine itself for a lecture/presentation, lunch, tours of the nursery and greenhouse areas, and revegetation sites. Then it's back to Zyzzx for dinner and a follow-up discussion. On Sunday, after breakfast, a presentation about the economics and politics of revegetation will engage you, sort of a reality check?!. Noncredit folk are then free to explore the desert or take off, while those taking the course for credit will take the exam. Most should be on their way in the early afternoon so as to arrive home at a good hour.

The class is scheduled for March 27-29, Friday-Sunday (8pm Friday, but earlier arrival, in the afternoon is recommended to get settled in & scout about the Center). Registration deadline is March 13, and class size is limited. There was a good-sized group last year which included all ages, from students to professionals to desert lovers to retirees to environmentalists. Those who attended last year may wish to repeat as the course is somewhat changed.

The course fee includes two nights' lodging, a snack Friday evening, and five meals starting Sat. am. The Center is Spartan but wonderful. It includes adult size swings and, after lights out, incredible stars **Not to mention delicious food cooked there by the Desert Center "chef."**

Cost: \$146/person for noncredit and \$226 for credit (2 units). Well worth it. The course # is BIOL 1008, sched. # 12700V for credit of 2 units, or sched. # 12701V for noncredit.

Note: Restoring the E. Mojave isn't quite the same as restoring Sonoran Desert. Learn what applies and what doesn't. Learn the politics of restoration (between a rock and a hard place, environmentalists and land use folk). It's all fascinating.

To request a bulletin, register or learn about other classes at the Desert Center (ie. desert wetlands, painting the desert landscape, history, etc.) contact California State University, San Bernardino Office of Extended Education, by calling 909-880-5975, or email them at <oe@wiley.csusb.edu >.

Their street address is 5500 Univ. Parkway, San Bernardino, CA 92407-2397. Note that the Desert Center itself is not close to San Bernardino; it's actually closer to Las Vegas, NV. The extended education bulletin includes maps. Special needs likely can be accommodated (ie. veggie meals).

Cheers, Carol & Joe Wujcik



Rare & Exotics • Collector's Succulents • landscape Specimens
 Hours: Wed - Sat 100-5pm. Sun 12-5om
 (619) 259-4568
 355 N. Hwy 101. Solana Beech, CA 92015

WALTER ANDERSEN NURSERY
 3642 Enterprise Sreg
 San Diego, CA 92110
 OPEN 7 DAYS A WEEK
 9:00 A.M. TO 5 0 0 P. M.
 (619) 224-8271
FREE GARDEN CLASSES
9:00 A.M. SATURDAY MORNINGS



Abbey Garden
 Cacti and Succulents
 Lem & Pat Higgs
"Specializing in Mail Order"

P. O. BOX 2249
 La Habra, CA 90632
 (562) 905-3520
 Fax (562) 905-3522

GROWING PLANTS FOR YOU SINCE 1965

VISITORS

BY APPOINTMENT ONLY - Tues., Weds., and Thurs.
 Fri. and Sat. Barn to 3:30pm
 CLOSED SUNDAY AND MONDAY

MAIL ORDER AND WHOLESALE

Specializing in show quality plants for collectors.

WISH BOOK \$2.00



2326-2354 Bella Vista Drive
 Vista CA 92084-7836

(760) 727-1323 Fax (760) 727-1578

'Cactus King Nursery

SWEET VALENTINE GIFTS

- 1 Heart-shaped Living Succulent Wreath \$47.50
- 1 Heart-shaped Hoya kerrii - \$6.50 to \$15.00

MANY ADDMONAL SPRING SPECIALS

- 1 also ask about our
- 1 AMATEUR SUCCULENT LANDSCAPE CONTEST
- 1 Submit a 5 X 7 or larger photo of your garden to:

CACTUS KING NURSERY
 1534 Crest Drive
 Encinitas, CA 92024-5209
 phone (760)753-6939
 fax (760)753-4197

[e-mail: cactus@cactusking.com](mailto:cactus@cactusking.com)

- 1 1st Prize Landscape = \$200 in Cactus King Nursery Script
- 1 1st Prize Container Garden = \$50 in Cactus King Nrsy Script

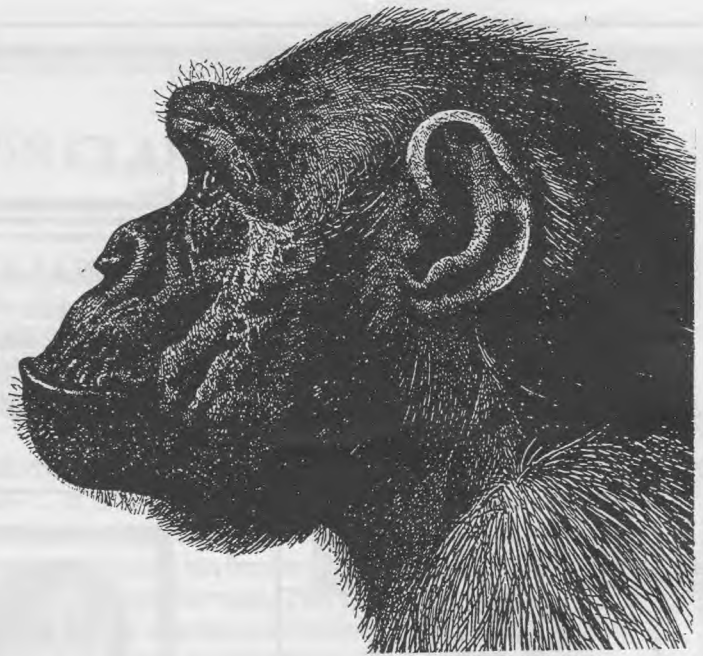
MINIIMI NIMEMINIVAIUMMENIMMINMENIMMEINIM

**Don't impale yourself
on your point of view.**

— TIMOTHY LEARY

**WISE AND
OTHERWISE**

by Michael Buckner



The secret of improved plant breeding, apart from scientific knowledge, is love. While I was conducting experiments to make spineless cacti, I often talked to the plants. . . . "You have nothing to fear," I would tell them. "You don't need your defensive thorns. I will protect you." Gradually the useful plant of the desert emerged in a thornless variety.

— LUTHER BURBANK TO PARAMAHANSA YOGANANDA

*Revolutionary consciousness is to be found
Among the most ruthlessly exploited masses:
Animals, trees, water, air, grasses.*

— GARY SNYDER

Dracaena is considered by me as a comparatively ancient group in *Liliaceae*, related to *Asparagus* and other few-ovulate taxa. *Dracaena* and allies produce rather voluminous, often dirty white seeds with bony albumen. The persistent notion that *Cordyline* should be considered as a close relative is ill founded. Apart from differences in the nervature of the leaves and the nature of the inflorescences, important differences are found in flowers and fruits. The perianth of *Cordyline* consists of two concentric unequal white whorls — and the pluriovulate ovary become a leathery capsule containing a number of sharply angular black seeds. This shows in my opinion affinities with rather remote groups of *Liliaceae*, where capsules containing numerous black seeds are common. On the other hand the relationship with *Sansevieria* has been denied repeatedly and this cannot be justified. In fact a thorough analysis of *Sansevieria* is quite likely to prove the impossibility to retain *Dracaena* and *Sansevieria* as separate genera.

Dracaena in West Africa - Agricultural University Wageningen Papers (1984) by J.J. Bos.

More than any other time in history, mankind faces the crossroads. One path leads to despair and utter hopelessness, the other to total extinction. I pray we have the wisdom to choose wisely.

— WOODY ALLEN

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

FORWARDING SERVICE REQUESTED

NOPROFIT ORG.
U.S. POSTAGE

PAID

SAN DIEGO, CA
PERMIT No. 737



Mammillaria thornberi

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.

1998 EXECUTIVE BOARD

OFFICERS

President: Tom DeMerritt
(619) 270-5544
Vice President: vacant
Secretary: Beverly Kirkegaard
(619) 670-1035
Treasurer: Herb Stern
(619) 223-9134
Immediate Past President:
Tom Knapik
(619) 462-1805

DIRECTORS

Elizabeth Athy
(619) 469-7647
Pamela Badger
(619) 589-1223
Tom Birt
(619) 452-0389
Michael Buckner
(619) 222-3216
Ed DeLollis
(760) 945-7892
Stan Yalof
(760) 743-1560

Standing Committees and Sub-Committees

Conservation:

Joey Betzler and Kelly Griffin

Education and Exhibits:

Brag Table - Shirley Berry
and Kay Quijada
Del Mar Fair - Tom DeMerritt,
Marylyn Henderson, Susan
Hopkins, Herb Stern and John
Williams

Plants of the month -

Beverly Kirkegaard
and Phyllis Flechsig

Show - Joey Betzler, Tom Knapik
and Beverly Kirkegaard

Winter Show - Ed DeLollis

History: Michael Buckner

Liaison:

Balboa Park Desert Garden
- Susan Hopkins
CSSA Affiliate Rep.
- Kelly Griffin
Quail Botanic Gardens
- Phyllis Flechsig
San Diego Botanical Garden
Foundation - George Plaisted
San Diego Floral Association
- Elizabeth Glover
S.D. Wild Animal Park's Baja
Collections - Joey Betzler

Library:

Elizabeth Athy, Anna Cornett
and Tom Birt

Membership:

Joey Betzler (565-8810)
and D'erdra Smothers

Plant and Seed Exchange:

Plants - Sara Schell
Seeds - Kelly and Sean Griffin

Plant Sales and Supplies:

Annual Sales, Auction & Holiday Plants
Elizabeth Athy, George Plaisted,
Tom DeMerritt, Ed Nolan and
Rick Plant

Monthly Plant Sales -

Marylyn Henderson, Gloria
and Kenny Graham

Monthly Supply Sales - George
and Jerry Plaisted

Publicity: Tom DeMerritt

Programs: Tom Knapik

Reception:

Ethel Standish, Marylyn Henderson and
Perlo Lewis

Regalement:

Monthly Meetings - Lee Badger,
Rudy Lime and Stefy Mangold
Picnic - Tom and Laura DeMerritt

— Other Committees —

Correspondence: Virginia Innis

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.

Certain specie of *Pelargonium*, viz. *P. radens*, *P. graveolens*, *P. capitatum* and *P. odoratissimum*, yield geranium oil which contains geraniol and citronellol, substitutes for the expensive attar of roses in the perfume trade. Pelargoniums are cultivated for their oil yield in the south of Europe, on the island of Reunion and in several African states.

The medicinal value of pelargoniums, supposed to give relief in cases of diarrhoea and dysentery, was know to the earliest tribes of Southern Africa.

The family Geraniaceae, which includes *Pelargonium*, formerly circumscribed a much wider range of plants. Hutchinson (1969) and other botanists hold that the Geraniaceae should only include the five genera *Geranium*, *Erodium*, *Monsonia*, *Sarcocaulon* and *Pelargonium*. The common diagnostic feature of all the members of the five genera is the typical elongated fruit or schizocarp which has five single locules (mericarps), each with one seed. The popular name of "Stork's Bill" or "Crane's Bill" is derived from the shape of the schizocarp, which resembles a stork's bill. Representatives of all five genera are found in South Africa.

J. J. A. van der Walt, PELARGONIUMS OF SOUTHERN AFRICA, 1977, Purnell & Sons Ltd, Cape Town, S.A.



There are more than two hundred species of pelargonium growing wild in different parts of South Africa. They vary tremendously in manner of growth, and in their leaves and rootstock, as well as the size and colors of the flowers.

Unfortunately the wrong name is still being used for these plants. Most gardeners refer to them as geraniums, which are quite different although belonging to the same family. The difference between the two is quite apparent. In the true geranium the five petals are of equal size and arranged in a regular fashion making a cup-shaped or saucer-shaped flower, whereas in the pelargonium the petals are of unequal sizes and they are arranged in an irregular way. The two upper petals are close together, separated from the three lower ones which are usually smaller. Most pelargoniums are perennials with an aromatic smell.

Many species are used by the Bantu for chest troubles. They infuse the leaves and drink the tea or burn the leaves for the relief of asthma.

Una van der Spuy, WILD FLOWERS OF SOUTH AFRICA FOR THE GARDEN, 1971, Hugh Kearsland Publishers Ltd, Johannesburg, S.A.

When you sit with a nice girl for two hours you think it's only a minute. But when you sit on a hot stove for a minute you think it's two hours. That's relativity.

— ALBERT EINSTEIN