South Coast

SOUTH COAST BOTANIC GARDENS 26300 CRENSHAW BOULEVARD PALOS VERDES PENINSULA

Cactus & Succulent Society

MEETING DATE: JUNE 14
SUNDAY

TIME: 12:30 Board Meeting 1:30 Regular Mtg.

PROGRAM: DUDLEYAS

Kei Nakai of Hawthorne Nursery will tell us about these relatives of the Echeverias. Many of course are native to our California coast, including the Peninsula.

REFRESHMENTS: Joining
Verna this month will be
Eleanor Barker,
Jane Keller,
Doug Rawcliffe and
Dorothy Yakoubian.

THANK YOU!

Brágging Table: Give your plants a break from the hot sun and bring them to the meeting for us all to admire.

SALES: Supplies and such for sale to members as usual.

WELCOME TO OUR NEW MEMBERS! Addresses to add to the club roster are on the inside back cover. Everyone, wear name badges to help our new members and guests figure out who you are!

PLEASE TURN THE PAGE FOR BOTH GOOD NEWS AND BAD NEWS....

the JUNE 1985 NEWSLETTER

Word has just come that Dick Wright, hybridizer of Echeverias, grower of rare succulents, and nurseryman, has lost his home and nursery to one of the raging Southland fires. Apparently he and his wife escaped just in time, and at this writing have not been allowed back into the fire zone to assess damage, though probably everything has been destroyed.

Plans are underway for those having the Wright hybrids to donate cuttings etc.; and John & Mary Cooper, 1097 Crestview Rd., in Vista 92083, will loan the Wrights a greenhouse to establish these. The Growers Meeting on July 17 in Riverside is one date for the donations to be made.

The Wrights have probably lost all personal momentos and so if you have old photos etc. which involve them, perhaps copies could be made for them. The Wrights are staying with their daughter in Fallbrook at present. Let's hope no other growers will suffer loss from these fires. Many nurserymen are located in vulnerable areas.

NOW, GOOD NEWS!

Our show and sale was a tremendous success thanks to our hardworking members, and Norma Holley and the rest of the show committee especially. Norma writes: "I wish to express my deep appreciation to all who helped make the show possible. Everything went well." She wants to remind everyone that our board meeting is the time to discuss possible changes for next year so that next year is even better.

People's Choice was won by C.W. Elliott's <u>Aeonium atropurpureum</u> crest by a vote over Larry Grammer's <u>Notocactus magnificus</u>, with Larry's

Optimistic.

Echeveria domingo coming in third.

And now for the medal winners:
Div: I Best Cactus - Larry Grammer
Div. II Best Other Succulent -

Div. III Best Arrangement Dorothy Yakoubian

Larry Grammer

Div. IV Best Miniature

A. Cactus - Robert Causey

B. Succulent - Mary Belle Wallenhorst

Div. V Best Collection - C.W. Elliott

Div. VI Best Arts/Handicrafts - Norma Holley

CONGRATULATIONS TO ALL WHO ENTERED THE SHOW WAS A WINNER!

SOUTH COAST CACTUS AND SUCCULENT SOCIETY the second Sunday of each Month at 1:30 P.M. in the afternoon in the classrooms adjacent to the Frances Young Auditorium at the SOUTH COAST BOTANIC GARDEN 26300 Crenshaw Boulevard Palos Verdes Peninsula, Ca. Phone 377-0468 CLUB OFFICERS FOR 1985 Jim Hanna Second Vice-President Bol Causey, Carol Kennedy, Joycelyn Yee Please send N.L. info., articles or corrections to: 0

NOTES ON ASCLEPIADS - from the San Gabriel Study Group June, 1985

Monadeniums don't like winter cold... Asclepiad seed must be fresh for optimum germination,,,Stapelia longii has an orange flower... Now's the time to propagate stapeliads... If you graft, push oozing liquid aside from cut surfaces and then join... Mealies love Asclepiads...So does rot and etc....Preventatives may be useful...Black spot may affect some shoots - remove these affected branches if possible... Asclepiads are sometimes easier to grow in smallish pots... Take cuttings for backups as these plants occasionally like to drop dead... In general, grow them a little on the hard side (ie. 40% shadecloth in full sun, or under lath etc. Don't grow soft, but don't fry. - CW

WHEW! THAT'S A HOT SUN UP THERE!

This is the time of year when even coast dwellers realize they live in a desert. I doubt anyone needs a reminder, but the hot weather may require changes in watering patterns. Water will evaporate faster than usual. Some plants will become super thirsty. Others will want to decelerate into summer dormancy. Also plants which used to be shaded by morning

Not so their human guardians weeding, watering, repotting, for those gardeners who must charges.

clouds may now need some protection. Others will no doubt groove on the increased irradiation! melting away as they toil among their plants, and dividing. There's no summer dormancy maintain constant and loving watch over their

- Carol

P.S. When weather is hot & sunny it's best not to insecticide. Wait for cooler, cloudy weather.

LONG BEACH CACTUS CLUB SHOW AND SALE:



Sunday July 21, 1985, 10 AM to 5PM - free admission tours of the Clarence Wright Memorial Garden, tours of the historic Dominguez Adobe - parking at top of hill this year! (thank heavens)- sale of plants and pots - oh yes, and a show too! The Competition is open to all amateur collectors. Setup is 7AM to noon on Saturday, July 20 with judging at noon. For more information call

Plant drawings on this page are by Eleanor Barker for previous S. Coast Newsletters.



"A PROFUSION OF TUBERS ... "

The following was written after hearing a slide-talk presentation by Seymour Linden about his African trip, which he gave to the San Gabriel C δ S Society in June 1985. - CW

Zimbabwe abounds in geophytes - in fact people refer to it as having an "underground forest"—"a profusion of tubers". These include species of Cissus, Euphorbia, Asclepiads, & cucumbers (and all of them nearly impossible to dig up!)... Baboons, by the way, are keen to eat Brachystelma tubers....When someone refers to the Umvumwuw River, they are not kidding....Regarding setting out with a goal in mind: you'll find something, though it may not be what you had in mind to begin with...Now, to give you an idea of some of the slides accompanying the talk, imagine an Adenia fruticosa forest...imagine a snail so huge it could eat L.A. (then put it firmly out of your mind if you can!)...imagine spotted Aloes, unspotted Aloes, and everything between, all one species...imagine Aloe and Euphorbia trees, imagine forests of them...imagine huge gigantic "gorgeous" Adenium obesums...imagine the perfect Acacia....Now start saving your pennies. How much does it cost to go to

AT THE HUNTINGTON: The new Desert Garden Conservatory under John Trager's direction is now open between the hours of 2.6.4 PM, Tues. - Sun. (reservations are required for a Sunday visit to the Huntington). BUT CALL FIRST to make sure the Conservatory will be open for viewing the day of your visit; it's open only if a Huntington representative can man it. (Call 213-681-6601 or 818-405-2100).

Although only open two months as of this writing, the greenhouse is filling up fast! You will find it an excellent place for identifying your own plants and for comparing various species within a genus (Dorstenia for example). It has a particularly fine selection of Asclepiads (the Stapeliad or Milkweed family), many of which are sending up their complicated, stunning, and "overpowering" flowers this month. They're all well worth a visit.

The Conservatory itself is made of concrete block construction with sides and roof of hammered glass which transmits diffused but very bright light. In fact, there's so much light that shadecloth covers the roof to create a bit of filtering. The capacity for air circulation and cooling (mechanical and passive) is augmented by a high roof - which also provides an airy feel for the psychological well-being of human visitors.

As for the outdoor succulents, they are as magnificent as ever. Whether inside or out, the Huntington plants are happy plants, as they should be! Come see it all for yourself!

GEOPHYTE:



EAPHIONAL ME

OK folks, what's this? A plant whose main stem or storage organ is underground? Righty-ho! John Trager in his "Merophytic Plants" talk refers to geophytes. Many of our most treasured caudiciforms grow this way in nature even though we usually raise them above soil level in cultivation. Bulbs also are 'geophytes. Webster's defines the word as "a perennial plant that bears its overwintering buds below the surface of the soil." The soil provides protection against such things as drought and predation. During tough times the plant can jettison its deciduous foliage/stems etc. - whatever is aboveground. How many geophytes do you grow? Now can you define xerophyte, lithophyte, epiphyte, hydrophyte, and halophyte? Aha, gotcha on that last one I bet. Hint: halophytes grow in saline habitats, as do halobionts. It's all in Websters!

The following article by me and the drawing by Nancy Birnbaum (first entered into the S. Coast C & S Soc. 1984 Show & Sale poster competition) were created independently, but they seemed perfect together; so perfect that, with Nancy's permission, I submitted both to "a higher journal" where they must have gone into permanent orbit - or perhaps they were detoured by a black hole. In any event, months later I sent a follow-up letter which met the same fate. But this time I expected it and wrote that if I heard nothing

etc. etc. I'd put them in our N.L. Moral: Always make copies! - CW

- by Carol Wujcik
- illustration by Nancy Birnbaum

With today's emphasis on physical fitness and staying in shape, it's heartening to note that our cacti and succulents are remarkably active, with some even indulging in the most vigorous of sports. Anyone believing they just sit there in their pots hasn't been paying attention. Spend any time at all with your spiny little friends and you'll notice first that, if grown outside especially, they'll follow the sun. In this pursuit they're almost all leaners and slouchers, some more than others. And unlike their human growers, lopsided posturings don't necessarily mean they're not fit and healthy. Certain Notocacti make leaning and slouching into an Olympic event. What do they care if human aesthetics want them soldier-straight? Following the sun makes perfect sense to the independent succulent.

Along with slouching, many cacti and succulents move from the center of the pot by pupping more on one side than on another, thus further frustrating the grower-trainer. Wait long enough and some plants will pup over the pot and down the sides, making repotting difficult at best. A person is hardpressed to repot often enough to avoid these difficulties - proving that the plants in some respects move faster than we do!

Then there are the stoloniferous succulents. Like porpoises in the ocean these exuberant members of the Stapeliads and Senecios and Sansevierias and Euphorbias (to name a few) plunge through the "soil" to emerge - anywhere - even out the drainage hole. Sometimes they just go round and round and are liberated only at repotting time! These are the twirlers and swirlers, and they're probably more athletic than smart. They haven't figured out that life in a pot is different from life in the wild.

So far we've seen that our plants are just fine at slouching, pupping, crawling, plunging, and twirling. Sometimes they climb. They clamber out pots, over rocks, up trees, along fences. Many climbers are epiphytes - Deamia testudo is a prime example. This strong cactus wraps itself around tree limbs and climbs and climbs - nothing delicate about it - until it blooms! Other epiphytes like to swing - from trees or pots - whatever is handy. Rhipsalis is a champion swinger!

Our plants don't stop at climbing and swinging. Some are cowboys, having learned to lasso and ride. Certain Opuntias of the Wild West are notorious for snagging a passing beastie, two or four legged, and hitching a ride to new "pastures".

Then there's swilling, for want of a better word. Let some succulents at the water and watch them swell; some even swell so much, they burst. Melocacti and Lapidaria are shocking swiller-swellers.

Excess guzzling may lead to another move, neither athletic nor healthy: nearly instant and total collapse. What was once a slouching, plunging, guzzler has now self-destructed into an icky gooey blob. With care however this final act can be averted, and the healthy, athletic cactus or succulent may live to excel at another sport.

Like fencing. Who among us has not been pierced by a rapier sharpness? Who has not been punctured by the Agave supposedly located way too many inches away to do damage? In fact the Agaves are the champion fencers of all time, almost continually positioned with blade extended, ready to thrust into the hapless grower.

Various cacti are into fishing and harpooning, especially the Opuntias and the Fero's. You could say they never let go and never quit. Even some of the tiniest Mammillarias can hook a 200 pound man by the finger and reel him right in.

Borzicactus aureispina is a sky diver - plunging out and down, shooting salmon colored flares all the way. Dorstenia is keen on the shot put, flinging seeds remarkable distances. And for pure brawn, the Ariocarpus are tops. These potbusters can shatter a strong clay pot seemingly overnight.

Whatever the move or sport, our plants are CHAMPS. Cacti and succulents are right in there pitching, climbing, swinging, riding, guzzling, twirling, diving, plunging and fishing. We their coaches and trainers are sometimes hardpressed to keep up.

Who says cacti and succulents aren't athletic?



There have been requests for something in the N.L. to explain what CSSA, our National Society, is doing with its research grants. Our Club voted to give a small contribution once, and members want to know what it's all about. In our last CSSA Newsletter, #3 1985, Seymour Linden explains it all.

CSSA RESEARCH GRANTS, 1985 - Dr. S. Linden, Chrm Research Comm. Over the last few years the CSSA has been gradually increasing its funding of grants to study succulents. Until a few years ago we only awarded a few hundred dollars a year for such purposes. The following report of 1985 grants shows how far we have come in the last few years. The first report on research grants was made at the 1983 CSSA Convention. This resulted in great interest among the affiliated clubs. The rare plant auction funds at that convention were dedicated to the research committee and many affiliated clubs donated funds directly. The current budget of \$3500.00 is composed of CSSA funds as well as those derived solely for the Research Committee such as the rare plant auction and club donations. The rare plant auction at the Eastern Conference in October, 1983, generated over \$1200! The 'mini'convention held at Fort Wayne, Indiana, in March of this year netted \$215.00 for the Research Committee. Two things have occurred to increase the funding for this work. First and foremost was the qualifying of CSSA as a tax-exempt organization during 1983. This was a major accomplishment made under the leadership of Dr. Ron Monroe and ably assisted by Paul Johnson of Fallbrook, CA. This meant that donated funds would be tax exempt to the donors. Secondly, was the success and related publicity of the initial research grants. The "seed" funds for the first year were budgeted under Dr. Monroe's administration from CSSA funds. Many people don't realize that the only source of funds that the CSSA has is from the plant sale at the annual show and from the membership dues (which barely exceeds the cost of the newsletter). Thus funding from the CSSA itself is negligible. We must depend upon the generosity of those that participate in the rare plant auction and individuals and clubs who donate directly. One of the main goals of our Research Committee has been to obtain funding to study plants in habitat and especially where the plants are endangered.

In 1984 our research grant enabled Dr. John Donald of England, a keen student of cacti and a leading expert on Sulcorebutias, to visit Bolivia to study Sulcos in the field. Dr. Donald has studied these plants for 25 years but because of the CSSA grant was able to study them in habitat for the first time. We are only now getting enough public attention to attract qualified research workers who need help for their studies. As you can see, we cannot fund complete expeditions, but we can add sufficient funds to make a study possible that might

otherwise not be done. Grant requests are reviewed by a committee composed of Dave Verity, Dr. Larry Mitich and Dr. Seymour Linden. Mr. Verity has been a student and grower/hobbyist of succulents for many

years. He is Research Associate, Mildred Mathias Botanic Garden, U.C.L.A. He has made many field trips to study succulents.



Dillenius's engraving of (Hortus Elthamensis, tab. 20 shoots' with long leaves and leaves on which the name Ce

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Mesembryanthemum loreum 200. 1732), showing the 'headnd trailing runners with shorter Cephalophyllum was later based.

ent Journal of Great Britain

Dr. Larry Mitich is in the Botany Dept., Univ. Calif., Davis. Larry is well known to succulent hobbyists for his many articles in our Journal. He also has traveled many times to study succulents.

We hope that the brief summary given below will whet your appetite for such projects and inspire you and your club to assist us in this work. All donations are eagerly sought and appreciated. Plese send any such to Dr. Seymour Linden, 1508 San Remo Dr., Pacific Palisades, CA 90272.

Dr. Heidi Hartmann is a Senior lecturer at the University of Hamburg. She has been studying Mesembryanthemaceae since 1971 and received her Ph. D. based on a revision of Argyroderma. Dr. Hartmann is a member of the I.O.S. In recent years she has made several trips to South Africa to study mesems and is very close to concluding a revision of the genus Cephalophyllum. Dr. Hartmann has been awarded a grant of \$750.00 to help defray the final costs of the cephalophyllum revision and in particular the costs of chromosome studies.

Gary Burrows is a botany graduate student at Mississippi State University working under Professor Sidney McDaniel. Mr. Burroughs project is entitled "Studies on Epiphytic Succulent Peperomias of Amazonian Peru" and will be part of his M. S. degree work. Dr. McDaniels and his students use the Institute for Botanical Exploration which maintains a permanent field station in Iquitos. This peperomia work is part of a study which will produce taxonomic keys to the peperomias of that area. We are awarding \$600.00 to the IBE to cover Mr. Burrows' transportation costs. His maintenence expenses will be donated by the IBE.

John Bleck is Staff Research Associate at the Univ. of Calif., Santa Barbara, CA. John is well known among succulent scientists and is a member of I.O.S. John and other staff members at UCSB (Dr. Nancy Vivrette and Mr. Wayne Ferren) have undertaken to cover the section Aizoaceae for the new Jepson California Flora. South African plants have become naturalized in certain areas of California and trips will be made to verify this naturalization and to study herbarium collections. We are awarding Mr. Bleck and his associates \$500.00 to partially defray their travel expenses.

Dr. Ruben Sauleda is Adjunct Assistant Professor of Florida Atlantic University, Baca Raton, Florida. Dr. Sauleda is working on a revision of the cactaceae of Hispaniola. He will be working in conjunction with the Jardin Botanica Nacional in Santo Domingo. We have granted Dr. Aauleda \$450.00 to help defray travel and maintenance costs to and from the Dominican Republic.

Steve Hammer lives in San Francisco, has been an active student and grower of lithops and conophytum for many years. We are granting Mr. Hammer \$750 to partially defray the costs of a trip to South Africa to study certain areas and certain conophytums.

Myron Kimnach is the curator of the Huntington Botanical Gardens and is an acknowledged expert on cactaceae and epiphytic cacti in particular. He writes articles for the CSSA Journal describing new species of cacti. His taxonomic work requires accurate botanical illustrations. We are granting Mr. Kimnach \$450.00 to help defray the costs of producing those illustrations. This will be the third year we have assisted in this fashion and many recent Journal articles have resulted.

CONSERVATION: SOMEONE OUT THERE IS ACTUALLY DOING SOMETHING!

BANKS OF LIFE -- LOOKING TO THE FUTURE

- Carol Wujcik

Zoos now are much more than places where people go to see wild animals. Research, breeding, and preservation of species are prime goals. Each zoo decides which animals to specialize in - climate is important - but there is purposeful duplication around

the world. Where conservation is concerned, you don't want all your eggs in one basket. It's the same with genes. You want to preserve the genetic diversity of a species - otherwise inbreeding will result in progressively weaker and more defective animals. But if zoos can preserve a varied gene pool, then one day perhaps animals extinct in the wild can be reintroduced to their original habitats.

Illustration by Eleanor Barker

So it is with plants. Individual collectors can help, but to assure continuity we need botanical gardens to do with plants what zoos do with animals: research, breeding and preservation of species. Display of plants and their here-and-now uses are important, but their very preservation is even more worthwhile for future generations to enjoy and benefit from. A plant preserved today may be tomorrow's cure for who-knows-what? If banks of life - animal and plant - can just make it into the next century, or two or three, the benefits will probably be beyond price.

One such garden is the University of California, Irvine Arboretum and Gene Bank, headed by Dr. Harold Kooperwitz, author and authority on S. African bulbs. Not surprisingly, the UCI Arboretum began working towards preserving the gene pool of S. African bulbs and corms, but has now expanded its activities to ALOE, another member of the Lily Family along with many bulbs. Aloes add low maintenance landscaping along with other S. African xerophytes. There's also a sand dune garden! About 200 species of Aloe are so far being grown, and the plants are considered more important than the landscaping though of course they're a beautiful addition to the Arboretum. And most thrive at UCI, but some require special care (ie. Madagascan species), and a few are nearly impossible, including, alas, Aloe pillansii.

The Arboretum is especially interested in breeding Aloes from different clones and from different seed batches. As human sisters and brothers ought not to marry for genetic reasons, so it is for plants. For the rarer Aloes then, the right breeding partners may be hard to find, and the search has involved other gardens like the Huntington. Many local Aloes are siblings or clone-mates, so the hunt for suitable partners has sometimes required extra effort. Also, almost all Aloes are self-sterile but hybridize readily, so they must be hand-pollinated. All of this is necessary to produce gentically strong, pure seed.

Already the UCI Arboretum is preserving S. African bulb seed through cryogenics. Then the stored seed becomes a bank for the future! That's several hundred years of future! Aloe seed is not yet being done but it should be possible.

The following is from the UCI Arboretum - Gene Bank return mailing envelope for Friends' contributions (the Arboretum is underfunded by the University):

The Arboretum at UCI has an active program to protect and conserve plant species for future generations. Between 10 and 20 percent of all higher plant species are currently endangered. This is a hidden crisis of epic proportions. At UCI we are growing wild species and storing their seed and pollen at subfreezing temperatures for future generations. We need the wild species for their untapped potentials for food, chemical resources, medicines, and also aesthetic qualities. Help us by becoming a friend of the UCI Arboretum. Your membership is a tax deductible contribution.

Called by Dr. Kooperwitz "the best kept secret in Orange County," the Arboretum is appropriately hard to find. Its only official address is that of UCI itself, and the entrance is located on a street with no name. From the 405 go south on Jamboree Blvd. until you reach Campus Drive. Turn left on Campus for ½ block, then turn right and go about 200 feet to the entrance gate. It's at the top of a hill. There are signs. If you end up at the bottom of the hill, go back and try again!

The Arboretum is open when staff are there, usually Mon. - Fri. from 10 - 4.

Arrangements can be made for weekend tours by groups. Since growing the plants is more important than plant viewing, expect fencing. In this way the rare plants are protected though casual visitors may not get to see the Aloes and other plants very close up.

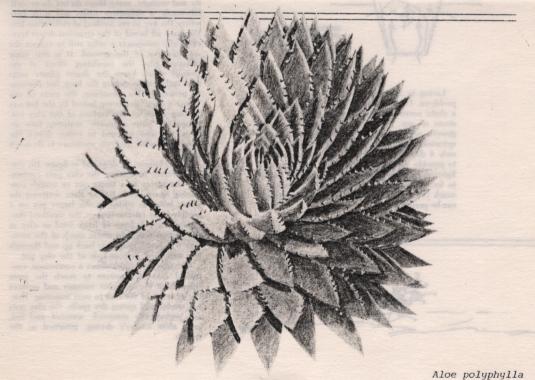
As for the bulb sale, it is planned for August 27 starting around 10 or 10:30.

Questions? Call the Arboretum directly at 714-856-5833.

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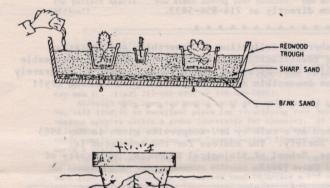
P.S. The Arboretum has a large inherited collection of Haworthias and Gasterias (also Lilies). Many of these need identification. The Arboretum needs knowledgeable volunteers to maintain the Haworthias and Gasterias, and also to attempt to accurately identify them. This last may be an impossible dream, but does anyone want to try?!

Note: Most of the above was learned at a talk by Dr. Kooperwitz given in May 1985 to the Orange County C & S Society. The address for the Arboretum is: UCI Arboretum, Dean's Office, School of Biological Sciences, University of California, Irvine, Irvine, Ca. 92717.



Dwellers in our California desert lands are adapted to hot summer dry heat which they survive by going dormant after the spring flowering season. However, life in a hot dry unwatered pot isn't the same as life in the desert. It's even more extreme. So how do we give these sensitive cacti a trace of water without really watering them directly? In his article, "SCLEROCACTUS POLYANCISTRUS: ITS GROWTH, DISTRIBUTION AND CULTIVATION, PART II, (\underline{C} & S JOURNAL, v. 52, 1980), Richard May has drawings which pretty much say it all. This method should also work for group plantings in which the various plants have different watering, feeding or even soil requirements — or in which plant placement is only temporary. It would be especially useful for grouping small clay potted succulents during very hot weather, when otherwise they might have to be watered daily. But back to the Mojave cacti. The following is from the above-mentioned Richard May article:

Fig. 10. Cultivation technique used by author for S. polyancistrus and other difficult Mojave cacti.



Living in Houston, however, is not without problems. During the past year there has been a slight narrowing of the upper portion of the stems of my Mojave cacti where the new growth occurs because of the reduced transpiration rates and sunlight (last January saw only 4 days of sunlight). It may be necessary to provide dehumidification and supplemental lighting to successfully cultivate Mojave cacti in locations such as this. There is, therefore, much yet to be done before the above method can be perfected.

CONTROLLED RATE OF WATER ABSORBTION

CLOSELY DUPLICATES DESERT



About four years ago, I stumbled upon a method which to date has worked quite well; so well, in fact, that I have now applied it toward cultivating other difficult cauti, such as the hooked spined Mammillaria (especially M. tetrancistra) and the Cal-

ifornia Foxtail (C. alversonii).

I attribute the success of my method to the fact that it creates a soil environment which more closely duplicates the summer dormant period in the Mojave. It normally does not rain in southern California from May to Octoher, yet most cacti after the long hot summer still look relatively healthy and robust. I observed that the same plants in my greenhouse, even under similar conditions of humidity and sunlight, many times do not do as well. Obviously a difference exists and it is here where the key to my method of cultivation lies. We have all heard of the stranded desert traveller who constructs a solar still to extract the moisture out of the ground. It is this same moisture plus the insulating effect of the ground which keeps the desert plants' roots cool and healthy during the long, hot dormancy period. In the meantime, the roots of our "Mojave cacti" are being baked by the hot sun beating down on the surface of the clay pot. When our "once a month" watering time arrives, we now proceed to either drown the plant or provide too little moiisture to do much

My technique, as depicted in figure 10, simply involves imbedding the clay pots containing the plants in a larger pot or trough containing sharp sand. Rather than watering the plant, water is added in the larger pot on a weekly basis (depending on the weather) during summer. A layer of bank sand or clay at the bottom will help retain much of the moisture which will evaporate back up and through the walls and bottom hole of the clay pot.

The above method allows a continuous, controlled rate of moisture to reach the roots throughout the long, hot summer and reduces the chances of rot due to over-watering. During winter and spring dry spells, the clay pots are periodically removed, watered and fed, and, after a day's drying, returned to the trough.

NEW MEMBERS!

Vernon Avaritt

Caudiciforms and Euphorbias

Julie N. Kato

Gen. cacti & succulents

Herbert & Heidi Keitz

Echeverias and Gen. cacti & succulents

John Stewart

Echinocactus, Euphorbia & Opuntia



Drawing to the left is by Eleanor Barker.

Aloe polyphylla (which some growers give alpine culture) is by botanical artist James McMannis of Ohio University and is from the 1982 Highland Succulents Catalog (Gallipolis, Ohio), with permission.

ZINC PLANT LABELS are grey, bendable and longlasting. Write on them with pencil. One shape is similar to the plastic labels while the other has a long narrow end to twist around hanging plants. Richard Poedtke of the Saddleback Bromeliad Soc. sells them at the Saddleback meetings, 100 for \$5.50 to leave. I don't know if he'll mail them. To Richard Poedtke 1709 Montgomery Dr. Vista, Ca. 92083 619-758-8332

AND FOR-YOUR-INFORMATION: What do you do when your hobby gets out of hand? Some start to sell extras....Then they print up a business card, so people can come buy. But CALL, FIRST!

633-2546

Wally & Tommy Wilcox

5416 PEPPERWOOD

(213) 633-5649



EVEN BARBARIANS LIKE CHOCOLATE~ CHIP COOKIES







YOUR OPINION COUNTS

DON'T FORGET! Our Board Meeting is at 12:30 Sunday, July 14. Everyone is urged to attend.



SEPTEMBER IS SYMPOSIUM MONTH.

September 28, a Saturday, is the date for the second Huntington Symposium on matters taxonomic in the world of succulents. This sounds imposibut last year's speakers were easily understood as long as the listener paid attention! No snoozing. VERY worthwhile.

September 19 - 21, Sarasota
Florida (just in case you're heading for points east):
A Symposium on Tropical
Epiphytes. As you know, some of our cacti and other succulents are jungle swingers and climbers.

Drawing on this page - by Eleanor Barker for the S. Coast N.L., Feb. 1974.

In keeping with its goals of research and conservation, the Marie Selby Botanical Gardens in celebration of its tenth anniversary will hold a symposium entitled "The Biology of Tropical Epiphytes" on 19-21 September 1985 in Sarasota, Florida, USA. Invited and contributed papers will address botanical and horticultural topics pertaining to epiphytes, including their ecology, physiology, reproduction, systematics, conservation, micropropagation, and cultural management in glass houses and tropical botanical gardens. A large collection of living specimens of Orchidaceae, Bromeliaceae, Araceae, Gesneriaceae, and Pterophyta, as well as many other tropical vascular plants, is maintained at Selby Gardens. These collections will serve as a focal point for observation and discussion during the symposium. The symposium is open to all biologists and horticulturists interested in epiphytes. Persons interested in attending the symposium, presenting a short paper and/or receiving additional information should contact Dr. W. John Kress, Director of Research, The Marie Selby Botanical Gardens, 811 South Palm Avenue, Sarasota, Florida 33577, USA (813-366-5730) by 15 June 1985. Details on the program of speakers, preparation of abstracts of contributed papers and posters, accommodations in Sarasota, and a final registration form will be sent by 15 July to those persons who have completed preliminary registration.

SOUTH COAST CACTUS AND SUCCULENT SOCIETY NEWSLETTER



bisail Adams

First Class

Cacrus Champ



Norma Holley

CSSA CONVENTION

San Diego July 8 - 12

ABSOLUTELY THE LAST CONVENTION UPDATE!!!!!!!

* Final schedule (probably) - see inside pages.

ADDITIONAL INFO: At this late date, only a few rooms are still unreserved at the University. So if you want bed & board at a ridiculously low rate, call Pat Mooney PRONTO. Also, there are motels in the vicinity of the University though none right next to it. AAA Auto Club has some listed. They are more expensive, although they do vary in price.

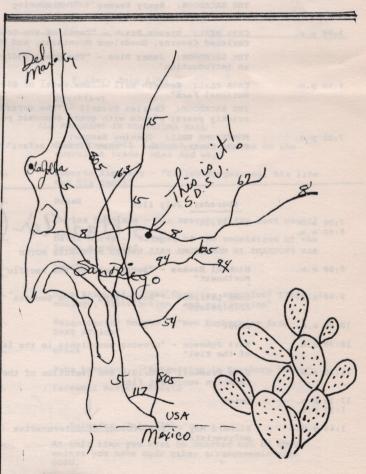
QUESTIONS?: Call Pat Mooney, Convention Registrar, at 1-619-427-6796.

CSSA ANNUAL MEETING: Sat. July 6 at 7 PM, Lecture Hall, L.A. Arboretum, Baldwin Ave. Arcadia. SPEAKER: Carlos Ostalaza of Peru. (He'll also be speaking at the July Sunset meeting).

AND —

CSSA ANNUAL SHOW & SALE: Sat. & Sun. July 6 & 7, 9-4:30 PM at the LA Arboretum. To enter in competition, please contact Fred Hutflesz, 213-667-3411. Preview Sale is Friday at 6:30 PM. (Gymnos were inadvertantly left off the show schedule. They'11 have their own class.)

SUNSET SHOW: Aug. 24 & 25 in Culver City. More later.



12:30 p.m. -1:30 p.m.

1:45 p.m.

Lunch

Richard May - "The ecology of Sclerocactus polyancistrus"

		Sunday, July 7th		Tuesday, July
9:00) a.m.	Bus departs for CSSA Show and Sale returning 5:00 p.m.	7:00 a.m	Breakfast
10:00) a.m	Registration - Tenochca Residence Hall	8:00 a.m.	
6:00) p.m.		8:00 a.m.	CASA REAL aul The
) p.m) p.m.	Student Union han	9:00 a.m.	MONTEZUMA HALL: Ch. hybrids in the Amer
) p.m) p.m.	Dinner Student Union hax Vair Conditioning		CASA REAL: Kenneth National Park"
		Monday, July 8th	10:00 a.m.	Break
	a.m	Breakfast	10:30 a.m.	MONTEZUMA HALL: Wei
	a.m	Registration - Tenochca Residence Hall	11:30 a.m.	MONTEZUMA HALL: Rot Argentine vegetation
Noon			12:30 p.m	Lunch
	p.m	Lunch	1:30 p.m.	Lunen
1:30	p.m.		1:45 p.m.	MONTEZUMA HALL: Fai
2:00	p.m.	CASA REAL: Dorothy Dunn - "The Baja Barrels; the Ferocacti of Baja California"		CASA REAL: Joseph C
		THE BACKDOOR: Henry Varney - "Introducing Adromischus"	2:45 p.m.	MONTEZUMA HALL: Her "Conservation of Mex
3:00	p.m.	CASA REAL: Steven Brach - "Cacti of the Southwest; Carlsbad Caverns, Guadalupe Mountains, and White Sands"		CASA REAL: Charles pears - plants with
		THE BACKDOOR: James Dice - "The genus Dudleya: an introduction"	3:30 p.m.	Break
4:00	p.m. /	CASA REAL: Kenneth Heil - "The cactl of Bid Bend	4:00 p.m.	MONTEZUMA HALL: Dav
		National Park" THE BACKDOOR: Charles Russell - "The versatile	5:00 p.m 6:00 p.m.	Dinner
7.00		prickly pears; plants with great economic potential"	7:00 p.m.	MONTEZUMA HALL: Car
7:00	p.m.	MONTEZUMA HALL: Opening Banquet Susan Carter Holmes - "East African safari"		ancient Peruvians"
			8:00 p.m.	MONTEZUMA HALL: Rar
	7			
		Thursday, July 11th	1. 1 -	1 095
	a.m	Breakfast > Has air Condi	tioning:	The Del
	ALL PROGRAMS	S IN MONTEZUMA HALL UNLESS OTHERWISE NOTED	0	The state of the s
8:00	a.m.	Michael Hawkes - "Succulents of the Pacific Northwest"	2:45 p.m.	MONTEZUMA HALL: Charle and the evolution in th
9:00	a.m.	John Lavranos - "Botanizing on the Socotra Archipelago"		CASA REAL: Steven Brac Carlsbad Caverns, Guada
10:00	a.m.	Break	3:30 p.m.	Break
10:30	a.m.	Karl Johnson - "Growing succulents in the land	4:00 p.m.	David Hardy - "Namibia,
11:30	a.m. ',	of the Kiwi" Dave Bramwell - "Origin and evolution of the	5:00 p.m 6:00 p.m.	Dinner
	9112	Canarian succulent flora"	7:00 p.m.	Wannan Bauk IImi

Werner Rauh - "The xero northeastern Brasil"

Yair Elber - "Succulent of Israel and their cul

Delegates Meeting

7:00 p.m.

8:00 p.m.

9:00 p.m.

Wednesday, July 10th

uly 9th

The Netherlands Antilles:

Charles Uhl - "Some species and American Crassulaceae"

meth Heil - "The cacti of Big Bend

Werner Rauh - "Peru and its cacti"

Roberto Kiesling - "Cacti in the tion"

Faith Campbell - "Protection of he U.S. and abroad"

ph Clements - "Show Judging"

Hernando Sanchez-Mejorada - Mexican cacti"

les Russell - "The versatile prickly ith great economic potential"

Dave Grigsby - "Round table discussion"

Carlos Ostolaza - "Cacti and the

Rare plant auction

tood

arles Uhl - "Chromosome hybrids n the American Crassulaceae"

Brach - "Cacti of the Southwest; wadalupe Mountains, and White Sands"

bia, land between two deserts"

erophytic vegetation of

ent plants and halosucculents cultivation"

7:00 a.m. - Breakfast 8:00 a.m.

7:30 a.m. Bus Trip #1 North County Growers. Bus departs returning to SDSU 5:00 p.m. (Box Lunch)

7:30 a.m. Bus Trip #2 North County Growers and Wild Animal Park with dinner. Bus departs returning to

SDSU 10:30 p.m. (Box Lunch)

7:30 a.m. Bus Trip #3 Huntington Gardens. Bus departs returning to SDSU 5:00 p.m. (Box Lunch)

7:30 a.m. Bus Trip #4 Huntington Gardens and Wild Animal Park with dinner. Bus departs returning to SDSU 10:30 p.m. (Box Lunch)

12:30 p.m. -1:30 p.m. Lunch

4:30 p.m. Bus Trip #5 Wild Animal Park with dinner. Bus departs returning to SDSU 10:30 p.m.

5:00 p.m. -6:00 p.m. Dinner

7:00 p.m.

MONTEZUMA HALL: Dr. Leroy Phelps - "Succulents as bonzai"

Friday, July 12th

ALL PROGRAMS IN MONTEZUMA HALL

7:00 a.m. -8:00 a.m. Breakfast

8:00 a.m.

Faith Campbell - "Legal restrictions on the succulent trade: what and why"

9:00 a.m.

Roberto Kiesling - "Carlos Spegazzini, his life and his cacti"

10:00 a.m.

Break

10:30 a.m.

Carlos Ostolaza - "In search of the lost cacti"

11:30 a.m.

Davie Hardy - "Glimpse of the vegetation of the Venda Republic"

12:30 p.m. -1:30 p.m.

Lunch

1:45 p.m.

Dave Bramwell - "The Canarian succulent flora; its ecology, distribution, and cultivation"

2:45 p.m.

Susan Carter Holmes - "New Euphorbias from East Africa"

3:30 p.m.

Break

4:00 p.m.

John Lavranos - "Botanizing in Southern Yemen"

7:00 p.m.

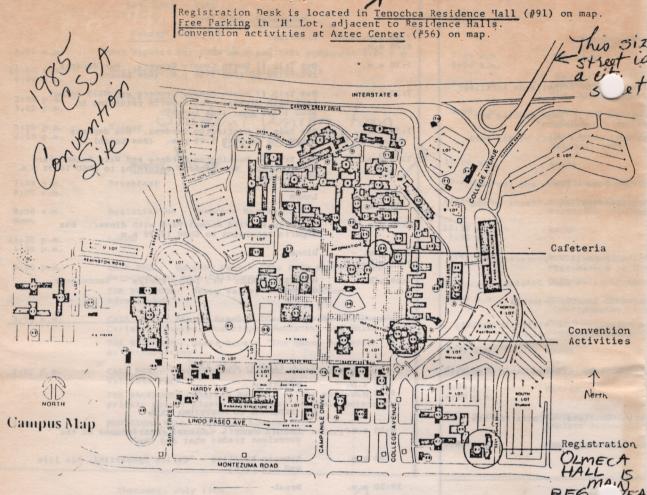
Farewell Mexican Fiesta

Satruday, July 13th

11:00 a.m.

At this time you must be checked out of SDSU unless you have made other arrangements with SDSU.

PLMECA HALL



TO GET A PARKING PASS for "H" lot for the day or the duration, go to Tenochca Residence Hall. See map.

HANDICAPPED: The campus is hilly and there is a climb up a ramp from "H" parking lot across a busy street to the campus. BUT THERE ARE HANDICAPPED

FIELD TRIPS TO BAJA:

July 1 - 5: Central Desert, with Jim Dice July 13 - 25: N. Pacific Coast etc. with John Trager

Contact Baja's Frontier Tours, 3683 Cactusview Drive, San Diego, Ca. 92105, 619-262-2003 for prices, hotel info. etc.

PARKING SPACES RIGHT UP BY CONVENTION ACTIVITIES if your car has the handicapped emblem.

There should be aux condition in

Questions about this or anything else? You can call SDSU itself:

General #: 1 - 619-265-5200; Tenochca Hall: 619-229-2000; and

Housing and Residential Life: 619-265-5742. Pat Mooney's # is on pg. 1.

Convention person