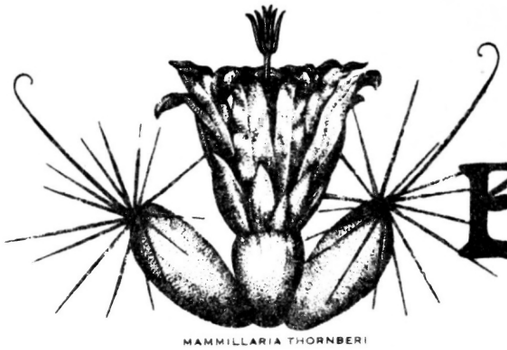
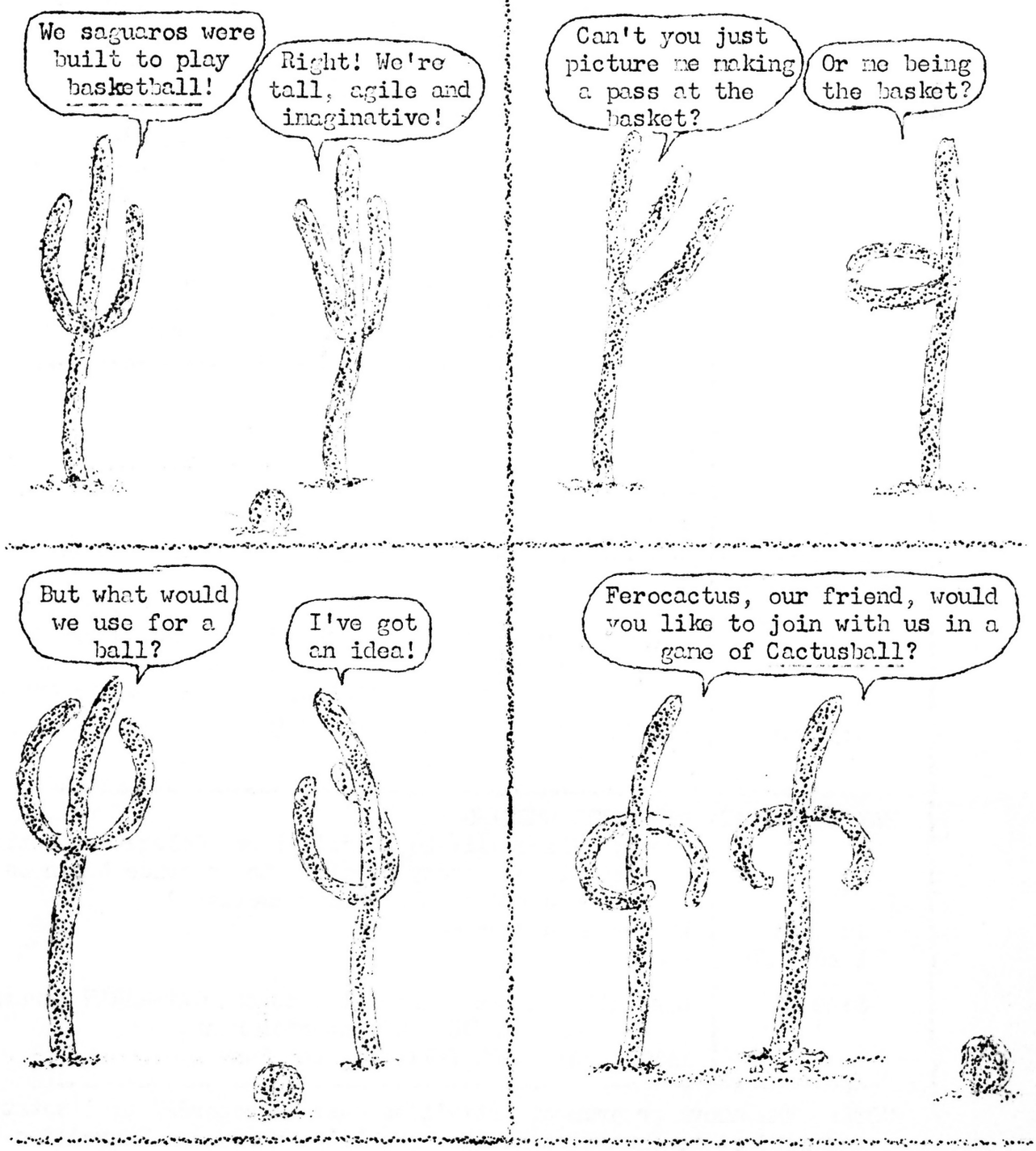


Espinas y Flores

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

TOMO NUEVE, NUMERO OCHO AGOSTO 1974



C S S A 1 9 7 5 C O N V E N T I O N

MAY 12-16, 1975 --- BAHIA HOTEL

CSSA REPRESENTATIVES, numbering 18, from the EL CENTRO, PALOMAR and SAN DIEGO CLUBS met Sunday afternoon, July 14th, in room 204 at Casa del Prado in Balboa Park to formulate plans for the SIXTEENTH BI-ENNIAL CSSA CONVENTION which will be held in San Diego, May 12 to 16th, 1975.

Judging by the enthusiasm and interest exhibited by the group from the three Clubs, the 1975 Convention should be the finest yet. All signals are 'GO'. Following is an outline of projected activities and a proposed schedule which will form the basis of convention activities. It is subject to change as required in coming months.

TENTATIVE ACTIVITY PROGRAM

MAY 11 SUNDAY	PRE-CONVENTION REGISTRATION, Plant sales. VISITS TO LOCAL GARDENS in three areas: (1) Beaches, Linda Vista Downtown (2) East to San Diego, La Mesa and El Cajon, and (3) Southeast to Chula Vista and Imperial Beach
MAY 12 MONDAY	REGISTRATION until noon, luncheon on your own.
1:30 to 4:30	PROGRAMS --- Charles Glass, Program Chairman
7 PM	OPENING BANQUET sponsored by El Centro, Palomar & San Diego
8 to 9:30	PROGRAMS, Formal and informal
MAY 13 TUES.	ALL DAY TOUR to North County Nurseries, with box lunches. ALTERNATIVE --- Visit to Tijuana, dinner, **hailai, jai alai.**
7 PM	DINNER at the Bahia sponsored by out-of-town Club.
MAY 14 WED.	GET ACQUAINTED, PLANT SALES
9 to 12	PROGRAMS
12	Luncheon on your own
2 to 5	PROGRAMS
6	ZOO TRIP and dinner at the Zoo
8 to 9	PROGRAMS
MAY 15 THURS	BUS TRIP TO BORREGO PARK, JULIAN MUSEUM ALTERNATIVE - Trips to local points of interest such as: Point Loma Old Spanish Lighthouse, Mt. Soledad, El Mercado, & Old Town, San Diego Zoo, Boat Ride on San Diego Bay Planetarium, Natural History Museum
6:30 PM	DINNER and Program or show at the Bahia sponsored by out-of-town Club.
MAY 16 FRIDAY	DELEGATES MEETING (Note: There will be a preliminary Delegates Meeting, probably on Monday morning, to announce business to be conducted at the Friday meeting.)
12 Noon	Luncheon on your own
1 to 5 PM	PROGRAMS
6:30 PM	BOAT RIDE on the Bahia Belle to the CATAMARAN across the Bay for a 'LUAU' and entertainment. RETURN BOAT RIDE following the Luau.

NOTE: The above program of activities must be regarded as 'tentative' and subject to change as months pass between now and Convention time. The program in its final form will appear in the Journal in more detail in coming months.

HISTORY IS THAT WHICH HAS GONE BEFORE

- - - - - - Doc R V Vaughan - - - - -

The sunset of a long life brings many rewards to the elders who observe the pages of history as they are written daily, weekly and yearly. We are able to make comparisons and observations and to look into the future and, like Jeremiah, cry out warnings that the populace will not heed.

History is that which has gone before! To the young of today who are making history page by page, it is dim, musty and dusty 'old wives tales" of tombs, stones and bones.

The ancients, be they Romans, Grecians, the Plains Indians of America, the Vikings of the Nordland, or the jungle savages of Africa, all respected and harkened to their elders in the council for they well knew that the future well-being of all depended upon the advice and warnings uttered in the hogans and teepees and the marble halls of Rome and Greece.

Great cultures were erected and sustained and all that we have today was fabricated by hands--now dust. The laws we abide by and the laws of Nature that govern our energy and the use we put it to today, were enfolded by the labor of those dedicated to making this earth a better place for us all. Most of them did this without monetary reward.

It is possible to count on your fingers the men and women who have done for humanity anything really worth while. The perfection of the airplane is the final result of the labors done originally by a Chinese priest who discovered magnetism by floating a steel needle upon a saucer or water or oil.

This simple discovery opened navigation of the seas to the Phoenicians and the Vikings. The camel trade routes from Cathay to Italy depended upon this needle to chart their way across the dangerous dusty desert.

Harvey spent lonely nights in fear of the priests of his time as he cut and anatomically researched the human body to find "why does blood flow"? The name 'knapsack' was given to the big artery, the 'aorta', the great artery springing from the left ventricle of the heart. Harvey had to keep his body parts in a bag (knapsack) as he was ever-fleeing the law against desecration of the body of humans.

Few of us in this day remember Watt, Ohm, Amphere, Lyden, Marconi, Edison et al. who made modern communications possible. When we see giant planes thundering thru the air, few of us remember the years and the united work and money of certain citizens who made all this possible. Ford alone had an idea. His friends and family, by toil and denial, gave him money to launch his enterprise and put our nation on wheels.

Somewhere in the dim past a man thought up the wheel. Before that his fellow toilers were satisfied to drag or tote their loads or use camel or burro backs. No doubt there was a great outcry when this wheel was shown to the publicans. Try to imagine our present day transportation problem without the wheel.

Continued next page.

HISTORY IS THAT WHICH HAS GONE BEFORE----continued:

As transportation and communication brought men into closer relationship, he travelled into other societies and cultures and saw many things that he enjoyed, envied or disliked. This expansion brought forth from the "Do-gooders" a desire to uplift all others to the new high degree of culture and of things material.

Then came those who proclaimed "Cut me in on the action!" who harangued the less fortunate that they too were entitled to the 'Good Life'. The feeling now seems to be that we must take from those that have and give unto those who are not spinning or toiling in the vineyard, but who are sitting by the well of cool waters and eating figs in the shade of the date palms.

From cradle to grave the humans of today must fit into a plan that regiments him from time of birth to the end of his journey, to toil to support those that form an elite governing force in the temple of trade, known as "labor leaders" and "politicians".

The gold of trade is in jeweled raiment hidden in vaults well beyond the reach of the milling masses who are ever on the verge of hunger. Food that they refused to stoop to garner from an abundant earth is now beyond their reach. These politicos and labor leaders demand and make laws to supplement laws. "You must pay this man so many shekels" forgetting that the law of laws said unto us: "Pay unto each his fair earning".

The most destructive law ever put on our books is the "minimum wage law". Never in all history have any two men been equal in earning capacity either in brute strength or brain waves. The only way for all to be equal in earning power is for a certain number of men to unite and develop an industry wherein each gives into the treasury a certain sum of money, as did Ford, Chevrolet, Edison, et al. Each then received in return in proportion to the invested amount.

The next most destructive law is the one titled "soak the rich". Many think that taxing the rich out of existence would leave us their wealth and factories, their jewels and homes. Never have brains been taxed out of existence. There will ever be toilers with brains who save and invent and build, and if given a chance, give work and strength to a community.

Today we all are witness to moral and financial hurricanes that beset us. The future is most uncertain as viewed from past experiences.

As a boy in Montana where my family was 'sod busters' (circa 1880) they cursed the coyotes that stole a chicken or two or a shoat. Then came the prairie dogs and the vast destruction they wrought to the land. The dogs dug deep holes in the hard land and the melting snows were saved deep in the soil. The coyotes held the dogs in check. There was ever a balance. Many dogs meant many rattle snakes.

I believe that men and wages seek their own level. No law can regiment all men into a facsimile of a perfect person agreeable to all other folks in a community unless there was complete communism.

Then would LIFE be worth LIVING ??

S U C C U L E N T F A N T A S Y

"Succulent Fantasy" was the title given to the CSSA's Ninth Annual Show at the Arboretum in Arcadia over the July 4th holiday. The show title is changed yearly. In 1971 it was "Wonderful World of Succulents"; 1972 was "Cactus Carnival"; 1973 was "Succulent Safari". Exotic show titles offer a challenge to the imagination of those who enjoy entering specimen plants in competition.

The Los Angeles Cactus & Succulent Society exhibit "Fact or Fantasy" was extraordinary. It was the product of the efforts of Connie and Woodie Minnich of Lancaster. It 'illustrated' the discrepancies between botanical and common plant names. It evoked profound thought about plant names, perhaps more than any scheme to date.

The exhibit involved sixteen cacti and succulent plants by botanical and common names. Common names were 'illustrated' with name-sakes. For example Echinocactus grusonii, the "golden barrel cactus" was shown with a gold-painted barrel of similar size. Mammillaria herrerae was with a golf ball on a tiny 'green' to illustrate why it is known as the 'golf ball cactus'. Senecio rowleyanus was a "string of pearls". Encephalocarpus strobiliformis was represented by "pine cones". No wonder common names are hard to displace in the vernacular of those without botanical learning.

Competition was keen. Well-tended plants reflected the pride of their owners. Fine plants are not limited to a few gardens. The geographical area represented by the show formed a giant triangle the apex of which was Sacramento on the north, Woodland Hills on the southwest and Riverside on the southeast.

The precise answer to "What is a cactus?" was provided by an educational exhibit cleverly done by Mary Belle Wallenhorst of Palos Verdes. The distinction between "Agave" and "Cactus" was made very clear. "Agave Cactus" wherever you are, you need no longer be a 'fugitive' by reason of your alias.

Show plants come from around the world. Native habitats include a wide variety of climatic and soil conditions. For the most part they may be grown in the open in Southern California, but a look at some of them revealed that they were under stress in a temperature controlled and air conditioned atmosphere, even tho they had the benefits of protection against heat, insects, sun and weather.

The 'rarest cactus' was a collected entry by Kathryn Sabo, a Mammillaria cerralboa, native to the Island of Cerralvoa off the gulf coast of Baja Ca. Sur, whence it derives its name. The story of this attractive mammillaria is told in the pages of the Journal, 147-151, July-August 1973. Recommended reading!

"Rarest succulent" was Operculicarya decaryi, entry of Ed and Betty Gay of of Tarzana. The unusual plant affords the basis for a special plant study and report. It is not found in the volumes at hand for writing this report. Ed and Betty, you'd better think up a common name for it soon, its botanical name offers lots of room for misuse by most of us.

A very unusual and interesting exhibit was a 'caged' Ceropegia saundersonii in a specially constructed terrarium about 30" tall and a foot in diameter at the base, the work of Steve Southwell of San Jose.

Interest in plants is definitely on the surge and shows like this one and one in San Jose in September are the answers to "Where does one learn about plants"? Shows are the best way to get people and plants together for their mutual benefit. Shows require dynamic leadership. In the one just described it was provided by Kathryn Sabo of Woodland Hills. All the plants and people say "Thank you Kathryn". (Note: This show report replaces pages 5/6 'Nibby's Notebook' for August ...Ye Ed)

"ENTUSIASTAS DE LAS PLANTAS".....A T E N C I O N !!

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HASTA QUE !

CSSA ANNUAL MEETING ---- ARCADIA ---- AUGUST 3rd, '74

. . . . . .

INTER-CITY SHOW --- SAN JOSE ---- SEPT. 8 and 9, '74

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I. O. S. CONGRESS ---- SANTA BARBARA, CA., SEPT. 10 to 15, 1974

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Sorry, Señora Echeveria de Agosto, your copy and mug were unavailable at press time, but we will enjoy meeting with you at Casa del Prado on Agosto 10, 1974 at 1:30 p.m.

...Hasta luego, Señora

CHIHUAHUA - SONORA - SINALOA - BAJA CALIFORNIA

Ed & Betty GAY

Chihuahua, Sonora, Sinaloa and Baja California! That's where we were on this year's field trip—three weeks of exploration and discovery.

Rivers, pine forests, Copper Canyon, new places, new faces, new cactus areas. Those are a few of the things we saw. With our friends Ted and Virginia we wound through mountains and valleys—up to nearly nine thousand feet, down to one thousand. Our two campers shared campsites, bulged over the ends of a country-style ferry crossing the Rio Yanqui, fitted cozily aboard a flatcar for a ride on the Ferrocarril del Pacifico from Creel to Los Mochis.

A tantalizing question to many of us for many years has been that of the possible links between the miniature mammillarias of the Sierra Madre Occidental--M. saboae, M. goldii and M. teresae. Especially since Lau's discovery of his "number 777" near Yecora last year, there has been the exciting potential of additional locations still to be found. This search was the chief aim of our trip--though of course any new area is always a temptation, and we were curious as to whether it was true that only a four-wheel drive vehicle could get through the mountain passes from Sonora to Chihuahua.

Regarding that last thought, we can report that it's rougher going than the old Highway No. 1 of Baja California used to be, especially for a good part of the way from Yecora to Matachic, when we had low gears but no brakes, and Ted had brakes but no low range on his automatic transmission. Six days to cover 300 miles means that we still have a lot of the planned trip to do in the future; but it also means that we didn't hurry over any of the 300 miles.

"Road" is a dubious word for the trail we followed. Even with a briefing from Archie and Lois Deutschmann, experienced travellers of the roads in Sonora, and with the help of maps which they supplied, it wasn't easy to know which fork of the road to follow, and we turned around more than once when a cattle corral marked the end of the track. Luckily we often had passengers, people travelling between ranches and small settlements, who were the best of guides. Friendliness and helpfulness were the rule here, as in most remote places, though our quest for cactus plants and other "weeds" must have given the people we met many a quiet chuckle.

Because of the generally higher altitudes, we were in oak and pine forests much of the way. Not too many cacti: Echinocereus polyacanthus and E. gentryi, Coryphantha compacta, Mammillarias olivae, wrightii, meigiana, craigii, tesopacensis, goldii, saboae, and several new locations of intermediate forms of these.

We began by visiting the M. goldii region, to refresh our memory as to the sort of site the little morsels prefer, and Ed had a high proportion of success in stopping at the right sort of locations thereafter. Each of us had the thrill of finding the "first" at a different spot. We're sure now that there must be an infinite number of sites between M. goldii to the north and M. teresae to the south. We can hardly wait until the next chance to go back and look for more.

Besides searching for cacti, we were also on the alert for palms and miniature agaves, especially A. polianthiflora, for Huntington Gardens. The weather was record-breakingly dry as we came through northern Sonora, causing Agave vilmoriniana to droop on canyon walls, all its long leaves hanging downward.

Near Moctezuma cattle were dying of thirst, twenty to thirty were lying in one row. All the tropical-deciduous trees were leafless--a gray landscape with few easily identified shrubs. Iponea arborescens trees displayed a few white morning-glory flowers, and the Ceiba acuminatas had not only orchid-like white blossoms but seed pods bursting with kapok. In a few of the deeper and more tropical canyons there were giant figs of at least two species. For a time there were many large cerei, but we left these behind as we started to climb.

When clouds massed over the mountains ahead, we forgot the potential of personal inconvenience and welcomed the relief that rain would bring to the countryside. One night it drummed on our camper roofs, another night it pattered--but by the time there was a real gully-washer we had reached Matachic and were cozy in its small motel.

Roads are being paved at a frantic pace all over Mexico, and one is under construction from La Junta south to Creel, at the edge of Copper Canyon. Actually we should say near the edge of Copper Canyons--the massive, sprawling stream-bed of the Rio Urique and its tributaries. For most of the way, though, we had the privilege of travelling the dirt, one-track road created for the logging trucks. Not much of a privilege when we were part of a group of three trucks going in each direction, all trying to get past each other without dropping off into the canyon; but very much a privilege because of the intimate nearness of the plant-laden boulders and the magnificent pines and oaks. Thanks to Dale Morrical, we had recent up-to-date information on this section of our journey.

At Creel we found that two or three days were required to arrange for shipment of our campers on a flatcar. Good news! Just time enough to go to La Bufa and see something of the canyon. What a fantastic two days! The construction of the new paved road continues south of Creel, so that we sped past Lake Arareco and an extensive agricultural experimental station on pavement. Soon, though, we were on gravel, interspersing spectacular canyon views with stops to make way for construction equipment and once for a dynamite blast.

The last half of the trip was over the now familiar type of single-track, winding mountain road. There were any number of smoke-stained caves laid open by the road construction or visible in valleys as we travelled along. Many of them were still occupied as homes by the Tarahumara Indians of the regions.

Although they are smaller and more sinewy-appearing people than the Navajos of our own southwest, the Tarahumaras reminded us of them in some ways. Some were to be seen in the villages in spotless tribal dress of loincloth and toga (men) or layer upon layer of full skirts (women), welcoming five pesos for a photo.

Others were going about their daily business of hauling pine poles, driving heavily-laden burros, or tending herds of goats, in complete dignity, and ignoring the strangers. Many have abandoned their caves in favor of log cabins, and are adopting the other ways of life of the twentieth century. Reserved people, but friendly toward us. Their beautifully musical language was a pleasure to the ears.

Descending into Batopilas Canyon at La Bufa, we dropped 4,000 feet or more in 8 miles or less. There was a kaleidoscopic view of one plant zone after another, from the pines at the top of the canyon to massive figs on the riverbanks so far below. On the way down we were again among cacti, lots of them: Pachycereus pecten-arboriginum, Lemaireocereus thurberi, Mammillaria craigii, Ferocactus pottsii--an absolutely breath-taking side trip.

CHIHUAHUA - SONORA - SINALOA - BAJA CALIFORNIA, continued

Back to Creel--Sunday and a carnival in town. The flatcar was finally located, but not the crew and materials needed to secure the campers on the car. By sundown Monday everything was done and we were on our way--feeling like long-time residents of Creel by then--waving good-bye to all our new-found friends, and preparing to eat our 'take-out' meals of chili rellenos and tacquitos from the El Manzano cafe.

Then, such a train ride as the regular passengers never see! Our own observation cars--the camper front seats--from which to view Copper Canyon by moonlight. Our own pullman cars--again the campers. And best of all, next morning at dawn, the open platform between, from which we again saw the swiftly changing plant zones as the train zoomed down through canyon after canyon and tunnel after tunnel, past little villages and spectacular views, to the Rio Fuerte plain.

A twenty-hour trip, what with the shunting back and forth at the freight yards along the way; then another hour or three to get unloaded; but a night and day that we will always remember with delight.

A disappointment--the ferry from Topolobampo to La Paz was full. Reservations must now be made at least a week or two in advance. So we couldn't come back through all of Baja California as we had planned. Instead, back by Highway 15 and Highway 2, and gorgeous camping nights at San Carlos Bay and at Sonoita.

A quick trip south to El Rosario to visit Anita and wind down a bit before the border crossing--and so home, full of both happy memories and even happier plans for the next time.

Hasta la vista! Ed & Betty

ANCIENT BACTERIA

Not very long ago there was a startling report about mysterious bacteria that were found buried deep in the ice and rock of Antartica. The bacteria may have been frozen in a state of suspended animation for 10,000 years, or even longer. Some scientists believe it may have been a million years.

The report comes from Dr. Roy Cameron, a microbial ecologist, and Dr. Frank Morelli, a microbiologist, both with the Jet Propulsion Laboratory in Pasadena.

When exposed to air, the ancient bacteria revived and many of them grew and reproduced themselves into active colonies when placed in nutrient fluids.

The revived ice age bacteria have not been identified and it is not known whether they are potentially harmful to man or whether their natural habitat is land or sea.

Some are rod-shaped, some club-shaped and some round. It was reported they could be seen wiggling when observed under the microscope. The specimens were found in cores of sediment extracted by drilling downward into frozen ground at two different sites. Geologists estimate the material in the cores was on the surface of Antartica at least 10,000 years ago and perhaps as much as a million years ago. The discovery could aid in understanding how life evolved on earth.

REFLECTIONS ON OUR FIRST WINTER IN SOUTHERN CALIFORNIA.

- - - - Audrey Johnson - - - -

After so many cold, rainy and snowy winters spent in the changeable climates of England, Canada and eastern parts of the United States in years past, the Johnson family finds it hard to believe that yet another winter has come and gone so pleasantly!

We are, I know, particularly fortunate in our location here in Escondido--high on the hillside and above the frost-line. All winter long we have revelled in the brilliant sunshine and masses of flowers which have bloomed even more profusely than during the hot summer months.

I must admit that we had wondered about Xmas, and our reactions to weather which would in no way encourage that "Xmassy" feeling, but, once again, even this complete change of pace turned out to be a most enjoyable one. We are all fairly adaptable, due to our varied wanderings, no doubt, and so we decided to make it a different Xmas in every sense of the word.

After preparing the Xmas dinner for the birds at their feeding station, and the turkey and trimmings for ourselves (not necessarily in that order) we suggested a drive to the top of Palomar Mountain before dinner to our guests. Somewhat surprised, they agreed. The drive up and subsequent hour's walk along the trails proved more than enjoyable, and we arrived back home to find the turkey browning nicely and "cooked to a turn".

After a Xmas drink on the patio, surrounded by our summery flowers, we finally sat down to our long-awaited Xmas dinner with ravenous appetites--derived from all that fresh air and exercise--of course! No, I can truthfully say that we really didn't miss the snow at all this year.

Apart from the endless enjoyment we derive from a never-ending growing season, we have the added bonus of a number of every-changing panoramic views. They have been a delight this past winter, even during a rainy spell when the valley below is rain drenched and the hills beyond are capped with wisps of low lying cloud and sometimes dappled with rays of sunshine in between showers.

On frosty mornings also, when the roofs of the houses below are white, there is a long, winding trail of woolly looking mist which sits right over the valley and disappears in the direction of Harmony Grove, but leaves the high hills beyond crystal clear and touched by the rays of the rising sun. Now, in the springtime, our valley looks beautifully green, with dottings of flowering fruit trees here and there and the avocado groves leading up to the hills above it.

Perhaps one of our favorite views is the one we get in the evenings when there is a full moon and brilliant stars in the vast amount of skies surrounding us, with the little lights of the houses twinkling in the valley below.

No, there will never be at any season a lack of things to see or do at our little Swiss Chalet type home overlooking Spook Valley, Escondido. Of that we are already quite sure!

G A R D E N V I S I T S

Second in a series:
Bette Baker

Nibby Klinefelter's home and gardens are located at the apex of steeply rising Milton Street at Fairfield. She takes advantage of every growing possibility which at this location includes four sides of the house, living room, kitchen window sill, front porch, back entrance, an angled back yard and a tree for baskets. That makes in all about ten climatic zones, doesn't it? Where else can you find such a combination.

In passing, perhaps it should be mentioned that 'the' spot which receives most consideration is the kitchen window sill with a very special potted plant. That's a plant and a story in itself. Maybe Nibby will write about it in a future issue of Espinas y Flores.

Nibby has a romantic gardening spirit, a marvelous characteristic which is indelibly reflected in her work with plants, particularly her choice of plants---- succulents. Nibby has gardened all her life and her special interest in succulents reflects amazing success.

It is both amusing and interesting to relate here how she started her San Diego collection with a 'bag of sentimental cuttings' taken on the spur of the moment at the time of her departure via air from a Chicago suburb, Barrington, Illinois

One cannot help but enjoy making the rounds of Nibby's gardening zones. She has an infectious enthusiasm for plants which she appropriately complements by the use of minerals and rocks which she has gathered over a period of time as the result of her intense interest and hobby in the allied field. The complementing hobbies provide unlimited possibilities for an artistic touch which is reflected in Nibby's gardening activities in the form of fascinating combinations of aeoniums, crassulas, dudleyas, echeverias and sedums. Does any other group of succulents provide more natural harmony than rocks and the aforementioned succulent plants. Nibby's ability to blend color, form and texture into plant mosaics is outstanding.

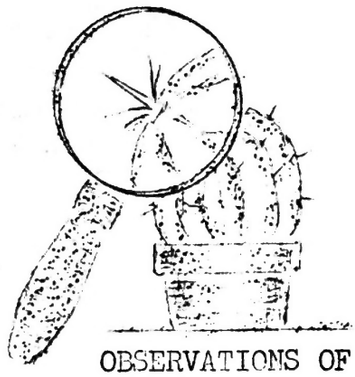
Nibby gives special attention to a very fine collection of smaller growing species. Individual specimens may be tucked away into just the right rock group or a crevice, or they may be protected in the shade of a larger plant species, not to mention choice specimens which 'share' areas inside her home. One must look carefully not to overlook diminutitive plant-and-planter treasures.

Nibby confesses that botanical nomenclature eludes her but when she describes the advantages of some species being 'poorly grown', or when one observes the clever plant-to-rock relationships, he realizes Nibby gardens with authority. She takes advantage of every growing area. Her home is fenced on two sides----posts, rails and fence boards. One doesn't ordinarily think of a fence as a 'growing area', or not until he visits Nibby's yard and sees her 'fence gardening'.

Altho the major plant area is alongside Fairfield Street, a charming, yet tranquil patio in the rear comes into view thru large glass doors once you enter the living room. Shade loving species are featured with a prodiguous array of beautifully cultured aeoniums. Branches of a huge black pine tree serve a useful purpose. On another side of the patio is an extensive assortment of cleverly designed miniature arrangements.

An original living Christmas wreath which only Nibby could fabricate, must be regarded as spectacular. One would have to see it in the making to understand how it is made, but then he might not be able to duplicate it. Nibby has collected and added plants and minerals of unusual interest from trips to the back country and to Baja which is her favorite place to get away from the pressures of every day life. Another facet of Nibby's activities may be discovered by reading the July-August issue of CALIFORNIA GARDEN, pages 111-113, titled "Pure Nostalgia".

HOW TO EAT CACTUS -- OROYA NOTES -- CACTI ARE LIKE CATS



OBSERVATIONS OF
Cacto-Phil Corliss

My favorite tacos at the world-renowned El Farol Restaurant in Guadalajara (or wherever they are offered) are the ones made from nopalea. You can buy "nopales" in cans or jars in almost all well-stocked supermarkets in the United States. I do not know if they are really from napolea or from an opuntia such as ficus-indica. var. Burbank's Spineless.

When I lived in Arizona I had a good stand of the latter along the highway outside my six-foot picket fence. People of Mexican origin constantly begged pads from me and when I refused, they would return at night with large paper bags and mutilate the plants badly. They took all the pads of new growth. Eventually I had to dispose of the opuntias outside the fence and replace them with oleanders, which are poisonous.

Jose has for some time been eating the tunas (seed pods) of many of the opuntias in my beach garden. The restaurant at the motel in Santa Tomas, between Ensenada and San Vicente, serves chilled tunas for dessert. They are the most delicious tunas I have ever eaten. I begged a pad of the opuntia from the cactus forest in which is located the motel's mobile park. It has grown exceedingly well, although the original planting was too close to the public sea walk and has been beheaded several times by frisbies and baseball bats. Rescued pads are now growing in Jose's jungle in the next yard--and thriving. However, neither stand has yet bloomed, so we are still waiting to enjoy the best of tunas in our own harvest.

I was interested to see tunas offered for sale in the fabulous market of Harrod's Department Store in London. They came from the Canary Islands---my favorite of all places---where, as in the Mediterranean area, they have taken over the landscape so completely as to belie their not being natives. Tunas are also offered in our supermarkets. Von's had them most of the winter this past season, priced at 15¢ each.

We recently had to perform the annual trimming of our Opuntia robusta. This year Jose claimed the severed pads to make tacos. He cut off the spines and then diced the pads. They were cooked in the pressure cooker for a long time--so long that they became very tender but much smaller in volume. Then he fried them with grated, hard-boiled eggs, onions and spices, and rolled them in tortillas to make tacos, which we both ate with much gusto.

Some of my oroyas are still blooming, two months after the first flowers appeared. There was an abortion of nearly one-half of the buds of one of the plants. Twenty-four buds had developed to show color yet only thirteen flowered and the others regressed without any remaining trace. It may have been because the plant was watered or because it received one small amount of liquid fertilizer. Two oroyas are clustering mightily. O. baumannii var. rubrispina has two heads, each about five inches in diameter and one head has three two-inch offsets. O. gibbosa is about eight inches in diameter and has nearly thirty offsets, some three inches in diameter.

"Cacti are like cats."

Cacti are very like cats in that they are prone to do what they want to do, and not what you try to make them do! Some cacti will 'sulk' and some will literally "bloom their heads off", despite identical locations and treatment. I like to let them surprise me---but that is hard to do.

One should really examine all plants at frequent intervals to check for insect or other damage such as sunburn, weeds, etc.

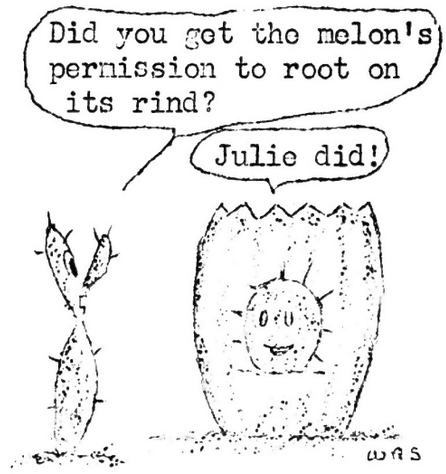
Helen Hegyi note: We finally succeeded in blooming Livingstone daisies from seed. Their color range is fascinating. Thanks for the tip!

BOARD MEETING: VIEWING---VISITING---VOTING !!

Board members, officers, et al, met in the garden of the Pat, Martin and Vickie Mooney home at 97 K Street in Chula Vista on the evening of July 19th for:

1) Business meeting, 2) Garden visit, 3) Bar-B-Q and 4) plant inspections which are, of course, always incidental to a gathering of cactophiles.

There was no program, as such, but Pres. Loyal Bibbey did call the attention of everyone to a report by the Treasurer Madelyn Lee. It was satisfactorily positive.



Rind Rooting

Everybody and everything was comfortable and relaxed and everybody took part in all activities. Even the plants seemed to be taking part. There appeared to be a 'plant dance' or a 'plant exercise' in the greenhouse. The potted ones especially got into the act, they were moving about involuntarily as they were admired, discussed, examined and closely scrutinized. Leaves were turned, soil was probed, flowers were sniffed. They received what Ye Ed would call in his working days, the 'third degree'. If anyone had asked different individuals which plant was most interesting, there would have been as many answers as questions, and all the answers would have been "I can't decide". As a jury they would have been dismissed.

An artful highpoint of the Bar-B-Q was a novel compotier---a watermelon on end, its original red core removed and replaced with a fruit compote. A cactus had been sculpt into the melon's rind. It was an innovation. What comes next? A cactus melon? Maybe! The cactus wasn't rooted, Julie Mooney did the carving.

There's much more to it than that of course. The plants were enjoying the meeting too. It would appear some of them were flowering for the occasion---- plant "show-offs" maybe on K Street? No, it's in good plant culture on K. Street.

A garden visit is like an iceberg, at most you see only about one-eighth. If you asked everyone present to jot down the names of eight plants they particularly liked, then scratched out the duplicates, you'd have a list which could be the basis for a fantastic collection. Muchas gracias to the Mooneys.

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PLANTS AND THEIR DEFENSES

Ordinarily we think of plants as "passive and defenseless", but there are unusual exceptions such as the Venus's-flytrap (Dionaea muscipula) native to our Carolinas which have two-lobed leaves which close like a trap when certain delicate hairs are irritated, as by a fly. Plants must protect themselves against a host of harmful insects that are always a threat since plants are insect food. On the other hand plants must attract insects to their flowers for pollination.

Some plants have developed various poisons while for purposes of pollination some have developed perfumes which attract birds and insects. Plant defenses consist of tough leaves, thick bark, spines, etc. Some plants which people and bugs regard as 'tasty' are vulnerable and as a matter of survival they have developed chemicals to keep away a host of plant eating insect species. Chemical compounds produced by plants consist of alkaloids, tannins, saponins and other poisons. Locoweed of the southwestern U. S. causes locoism in sheep, horses and cattle. (Loco, slang for an insane person or a maniac.)

It is believed that red attracts birds and that insects are blind to color or that they can see into the ultraviolet region of the spectrum and that some flowers which appear white to us might appear brightly colored to some insects.

ACTIVITIES---MEETINGS----PROGRAMS

AUGUST 10 --- Our August meeting in Room 101, Casa del Prado.
Speaker: Paul Bingham of Irvine (Club member) whose subject will be "PEDIOCACTUS". Paul has made a special study of this genus and is very familiar with the area in which they grow. His collaborators are Bob Taylor and Dr. Lyman Benson. (PS: Our meeting is first order of business, of course. Now let's go back a week)

AUGUST 3 --- ANNUAL MEETING OF CSSA will be held on the first Saturday in August at the Arboretum in Arcadia. The San Gabriel Society will host the event. Speakers will be:

Delmar D. VAIL, District Manager, Bureau of Land Management, whose subject will be "CALIFORNIA DESERT CHALLENGE".
Neil PFULB, District Planning Director, BLM, will talk on "CALIFORNIA DESERT PLAN PROGRAM".
After a luncheon for all present, Myron KIMNACH, FCSS and Past President of CSSA, assisted by spontaneous speakers will give the "Newer South American Plants" the panel treatment--they will be subjected to a barrage of words.

AUGUST 31 --- XTRA SPECIAL CLUB MEETING at 1:30 p.m. at Casa del Prado, Room 104 (it says here) featuring:
John J. LAVRANOS of Johannesburg, South Africa whose subject will be: "A GLIMPSE OF SUCCULENTS OF EHTIOPIA AND NEIGHBORING LANDS". Really, it's going to be more than a 'glimpse', it will be an 'eye-opener'.

SEPT. 5/10 --- I.O.S. CONGRESS meets in Santa Barbara --- attendance is <u>not</u> restricted to I.O.S. members. . .this is your opportunity to enjoy the best.

SEPT. 14 --- Our Program Chairman and VEEP, Martin MOONEY, says this date has not been 'nailed down' yet. There are two options:

1) Dr. Werner RAUH of Heidelberg University, or
2) Mrs. Cynthia GIDDY of the Province of Natal in South Africa.

Of course if both should show, what a program that will be.

OCTOBER 5 --- Len NEWTON of the University of Science and Technology of Ghana. Subject not yet announced, but it may be regarded as an extra-special meeting and the Auditorium at Casa del Prado has been reserved to provide extra seating.

All the above speakers are contributors to the Cactus & Succulent Journal. You would do well to get the back Journal issues and read-up in advance so you will know more of their interests and specialties. The Journals are: SEP-OCT 1971, NOV-DEC 1972, MAY-JUN 1973 and MAY-JUN 1974. Or get the JAN-FEB 1972 Journal and read more--pages 23-26.

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Jean HAPEMAN of our efficient 'regalement team' tells us she is going to Hawaii during the forepart of August. We think that is <u>great</u>, we wish we could go along, but <u>not</u> for the 'poi', Jean can have it all. Jean says it would be nice if about three Club members would help Leta in the regalement department in August. No mad scramble for the kitchen now---just some organized assistance for Leta.

CACTUS (I) OF THE MONTH

Dr. George E. Radwin--

1) Echinomastus
2) Gymnocactus
3) Neolloydia
4) Thelocactus

Although this article was originally planned to include only Thelocactus, it quickly became clear that genus Thelocactus has become so intertwined in the literature with the other three genera noted in the heading that any treatment must be "one for all and all for one".

Actually, of the four, Thelocactus, for all its apparent ambiguity, is the most clearly defined, largely due to the opposite being true of the others. Nevertheless, the generic concept of Thelocactus has become muddled by the passage of species into and out of it as if they were suburban commuters.

Gymnocactus is probably the weakest genus, in terms of validity. As several authors have noted, the name and its implied distinction from related groups refers to the naked (i.e. unscaled) ovary and fruit.

The weakness of this character is apparent when one realizes that Neolloydia, a genus that is similar in all other ways to it, typically exhibits a few abortive scales there and that Echinomastus, another closely related genus, has ovary and fruit bearing numerous scales. The situation cries for a careful, systematic study which may well suggest a lumping of two or more of these taxa.

Characteristics of Thelocactus include (usually) large, colorful flowers borne at the bases of grooves on young tubercles near the center of the plant. The plants have a globose to cylindrical growth habit, with tubercles arranged on more or less continuous ribs. Some species resemble Coryphantha species but differ from species assignable there in their ribbed structure and dry fruits.

The genus is "nearly identical to Echinomastus" (Marshall & Bock 1941). The range of the genus is from Texas through a large part of Mexico in dry, hot areas with well-drained soil.

Echinomastus produces flowers in much the same way as in Thelocactus. The primary difference between these two genera is in the site of seed attachment: Thelocactus --- basal, Echinomastus --- ventral. The range of this genus is the southwestern U. S. throughout much of Mexico, as in Thelocactus. Culture is best in sandy or gravelly soil with gypsum added. Water sparingly.

Neolloydia also has ribs (in this case spiralled) composed of tubercles. The flowers are large, pink to purple, and arise from the axils of the tubercles The fruit is compressed, globose, dull-colored and thin-walled, becoming dry and papery. The range of Neolloydia is also Texas through Mexico.

Following is a list of species and assignments largely as determined by Backeberg in "Die Cactaceae". It should be noted that other workers (Glass & Foster, Benson) have differed regarding one or another of these assignments.

ECHINOMASTUS	GYMNOCACTUS	GYMNOCACTUS	NEOLLOYDIA	THELOCACTUS
erectocentrus	aguirreanus	subterraneus	grandiflora	heterochromus
durangensis	beguinii	valdezianus	matehualensis	hexaedrophorus
intertextus	conothele	viereckii	odorata	krainzianus
johnsonii	gielsdorfianus	ysabelae	pilispina	lloydii
macdowellii	horripilus		pulleineana	lophothele
mapimiensis	knuthianus	NEOLLOYDIA		nidulans
mariposensis	mandragora	ceratites	THELOCACTUS	phymathothele
unguispinus	saueri	conoides	bicolor	rinconensis
	saussieri	cubensis	bueckii	tulensis
			hastifer	wagnerianus

S P E C I F I C E P I T H E T S

Mary Lou CARGILL, Fort Worth, Texas
(Continued from July, 1974)

bifarius	refers to two-rowed, arranged in two rows
bifurcate	two forked
biplanatus	pertains to being two-sided,
bisectus	bisected, halved or evenly divided
blandus	tempting, alluring or attractive
brachiatus	branched or branching, tree-like or shaped
brachy-	Greek word or prefix for 'short', brachi-
bullatus	1) inflated, 2)pimpled or roughened surface
bullulatus	blistered or erupted surface
caducus	frail, unstable, transitory or perishable
caesius	bluish-gray color
caespitose	growing in tufts
caespitosus	pertains to being tufted
cespitose	growing in tufts or mats, sometimes caespitose
calamitosus	causing a loss, damaging or miserable
calathinus	bowl-shaped or basket-shaped
calcareous	chalky
callosus	hard, having a hard skin or tough
callus	tissue which forms over a wound or cut, pertains to hard-skinned
calumn	Latin word for deceiving
calo-	Greek prefix for beautiful, lovely, attractive
calyptratus	hooded or covered
campestris	refers to 'of the fields' or 'of the plains'
candelabrus	chandelier-formed
candicans	whitish, white-woolly
candidus	shining-white, glittering white (albus, dead white)
canescens	becoming old, white or gray; hoary
caninus	sharp-spined
canus	whitish-grey, grey-hoary
capax	broad or wide
capensis	from the Cape of South Africa
capillaceus	hair-like
capillaris	fine as hair
capillatus	having hair or long hair
capitatus	a dense cluster, or formed in a head
capitellatus	formed in a small head
capri-	goat-like
castus	pure or spotless
catenatus	chained or linked
caulescens	beginning to stem, having vestigal stems
cauliatus	stemmed or branched
-caulis	stemmed
centetratus	many spined
cephalotus	large-flower-headed

SPECIFIC EPITHETS, continued:

cephalus ..... -headed
cerae- ..... refers to wax
-ceras ..... pertains to 'horned', -horned
cerinus ..... waxy
cernuus ..... drooping or bent over (sometimes 'cernous'

cereoides ..... resembling wax
cespitose ..... growing in tufts (sometimes caespitose)
chamae- ..... dward, on the ground or small
chilensis ..... from Chile
chloro- ..... refers to green

chlorosolens ..... green-tubed
-chromatus ..... -colored
chrys- ..... golden
chryso- ..... gold
chryserius ..... golden

chrysostomus ..... golden-throated
-cinctus ..... -edged, -surrounded
cinereus ..... cinder-colored, whitish grey color
circinatus ..... rounded or coiled
clandestinus ..... concealed or hidden

clavatus ..... club-shaped
claviculatus ..... shaped like a small club
coadunatus ..... united or jointed
coelestus ..... sky-blue
coeli- ..... heavenly- or sky-blue

collinus ..... of the hills
coloratus ..... colored
colubrinus ..... serpent-like
columnaris ..... columnar or pillared, tall and cylindrical
comaureus ..... golden haired

communis ..... common and gregarious or clustered
commutatus ..... changed
comusus ..... hairy
compactus ..... compacted or compressed
compressus ..... pressed together

comptus ..... ornamented or adorned
confertus ..... dense or closely compressed
conformis ..... arranged symmetrically, similar in form
congestus ..... massed or heaped together
conicus ..... refers to cone-shaped

connatus ..... joined together
connectilis ..... united, joined or tied together
constrictus ..... very erect, closely drawn together
conterminus ..... nearly related, close in appearance or habit
contortus ..... twisted, intricate or complicated

controversus ..... questionable or controversial
coriaceus ..... refers to thick leaves
corni- ..... Latin for 'horned'

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Affiliate of the

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MEMBERSHIP is open to all persons interested in cultivating exotic plants. Membership is $5.00 per year on an annual basis. Persons joining at other times may obtain back issues of the bulletin so long as they are available.

Page IN THIS ISSUE

PARODIA SANGUINIFLORA -- Please come home !

Nellie Kennett reports the absence of a Parodia sanguiniflora from Cal Expo, the Cactus Exhibit. It was flowering, supposedly out-of-reach and surely it didn't depart of its own accord. Anyone know about it?

Walter R. Scott
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Return Requested

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