

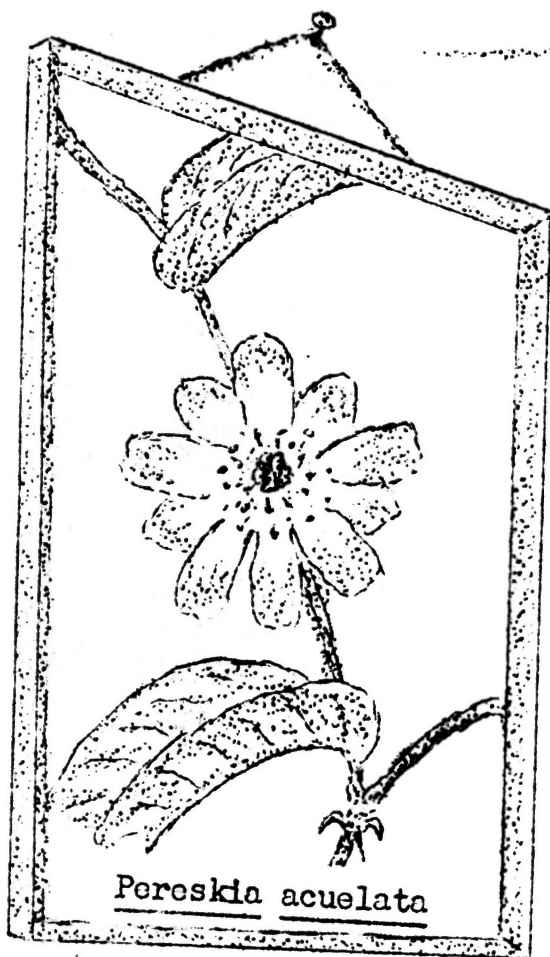
MAMMILLARIA THORNERI

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 TRES

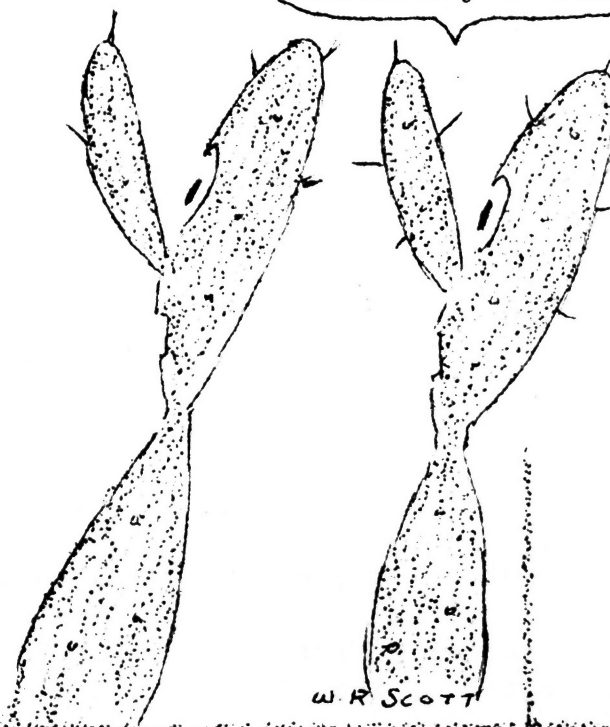
ABRIL 1974



Pereskia acuelata

So that's our
great, great, great
Grand-daddy who lived
in the tropics and
climbed trees?

He doesn't look like
any Nopalea I've ever
seen, besides he has
-- leaves. Look at the
three puny spines!
And his nickname was
'Gooseberry'. WOW!!



W. R. SCOTT

Family portrait

Y O U R L I B R A R Y

Edith Werner

"CACTUS COUNTRY" by Edward Abbey. If you are interested in 'cactus', you surely are going to be interested in Cactus Country. It is a book about Southern Arizona and the Mexican State of Sonora. It is an illustrated volume and it gives a good description of the area.

"BAJA CALIFORNIA" by William W. Johnson is another book for the 'at home' traveller who wants to know where his cactus come from. This is not a travel guide but it shows and tells where you might like to go.

"FANTASTIC CACTUS, INDOORS and in NATURE" by Edith Raskin is a good book for the beginner.

"SEDUMS" is a 58-page booklet published by the Succulent Plant Institute of England. It discusses culture, and so forth of many popular Sedum species. It is illustrated.

RECENT GIFTS TO OUR LIBRARY and DONORS:

- Phil BURTON: "What Kinda Cactus Izzat?" by Reg Manning.
- C. L. BENBOW: "The Iris Book" by Molly Price
- Dr. Philip G. CORLISS: "Hemerocallis" a book written by the giver.
- O. Ed MILLER: "California Rare Fruit Growers Yearbook, 1969"
- William NELSON: "Chemical Gardening for the Amateur" by Charles.

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SPEAKING OF GIFTS---our Jan.-Feb. 1973 issue of the Cactus and Succulent Journal of America is missing. A gift of this issue to our Club would be greatly appreciated and it would make it possible for us to get the 1973 volume bound.

.....

WINDIER THAN WASHINGTON D. C. ?? Could be !!

Very sensitive instruments aboard Mariner 10 which sped by the planet Venus this month (March) on its way to the innermost planet Mercury, detected some very unusual and violent wind patterns in the upper reaches of the atmosphere of the planet.

Mariner's television pictures taken in ultra-violet light showed clouds at a height of 45 miles which were circling the planet at speeds of 225 miles per hour.

A theory which would explain the winds velocity is that Venus is much nearer the sun than is the earth, resulting in much greater differences in temperatures between the sunny and dark sides of the planet.

We do know that temperature extremes result in atmospheric movements. There isn't that much temperature difference on our planet, but sometimes it appears extremes are approached in our 'political' atmosphere.

. . . Ye Ed

M A Y O P E N H O U S E

CASA DEL PRADO, ROOM 101, MAY 11th and 12th.

BY and FOR ALL CLUB MEMBERS

The month of May has been "open house month" for some years. It is reserved this year again for an Open House for the public. Remember the 'good old days' when you were limited: The 'Year of the Wood' and the 'Year of the Stone'? You aren't restricted this year. . .everything is in order. You will be permitted 360° of leeway.

All members are urged to take part, participate if you like. You may assume responsibility for a full table in any category or class as an individual, or you may combine forces with others and go for a group table. In the latter class you may have to cut up the ribbon--or whatever.

Altogether there will be 20 or more tables (28" by 8 feet, top side). The purpose of this 'early' page in April is to acquaint you with the up-coming Open House so you may start making plans. We don't know what our Program Chairman has concealed in his bracts, but he will let you in on all the details next month. In fact we think the 'program' will encompass the Open House in May.

There will be Categories or Classes for about everything, not only for cactus and succulents, but all allied and associated activities involved in the hobby. Following is a tentative schedule. It may be expanded during the month of April, or you may take it upon yourself to surprise the Program Committee by thinking up something they never even thought of. There's plenty of room at Casa del Prado. Before we forget--it will be in Room 101.

CATEGORIES or CLASSES:

SUCCULENT TABLE: A complete table prepared by a single individual or a group, with one acting as 'master'. If the exhibit should win an award, the award may have to be divided.

CACTUS TABLE: Similarly prepared. Maybe two people can do better than one, that is if both don't try to be the master (oops, the boss).

SPECIMEN PLANTS: The idea of this table is to make it possible for a number of persons to bring in single specimen plants in one or more genera. There should be many contributors to this table. It should be the highlight of the show. Maybe the envy of all club members whose plants aren't as 'showy' as those he is competing with.

ARRANGEMENTS: Everyone to his own thinking. This table usually winds up being the problem of the judges to the enjoyment of the competitors.

BONSAI --- GRAFTS --- ARTS --- HANDICRAFTS --- YOU NAME IT. These relate to the plant hobby, things which may be beyond the show committee, things they didn't know about. Let's surprise them !!

NOTE: Register your plants, et cetera as you bring them to the Casa. There'll be a table just for that purpose.

DOVER PUBLICATIONS

Anthony D'Attilio's new book "The Seashore Life Coloring Book" of shallow water plants and animals for youngsters from 7 to 9 years is now available.

It contains 46 pictures with accompanying black and white suggestive color areas on 8 x 11" pages.

Tony's art work has been published by Dover, Doubleday, Holiday House, Houghton Mifflin, Macmillan, Time-Life and others.

GOOD COLORING, TONY!

NEW YORK

Tony specializes in the fields of biology and zoology, but his work is not limited to such.

A lifetime special interest and hobby has been "malacology" and his magnificent illustrations have appeared in a number of scientific papers.

Yet another much more elaborate effort will be appearing soon.

Available at the Natural History Museum and Fine Arts Gallery and bookstores.

"HAND BAG CACTUS"

The other day I decided that it was time to sort out my handbag--a chore long overdue. With several inches of sand in the bottom (from specimens of shell and stones popped in there on walks along the beach) and odd small plants also collected in my wanderings and disposed of likewise, I almost expected to discover a poor little cactus nestled in a dark corner! No such luck! The pricked finger I had suffered a few days previously turned out to have been caused by an unfastened safety-pin which I had placed in my hold-all for some emergency or other. What a disappointment!

MY TIMID FRIEND, THE ROADRUNNER

I sometimes have a visitor--a rather timid young roadrunner--to the long rocky slope which I use as a bird-feeding station. With his clumsy attempts to conceal his rather bulky person, he is good for many a chuckle as I go about my daily activities. One day last week I was alerted by a muffled honking, plus a great deal of squawking and activity by the blue jays in the bushes at the top of the slope.

Curious to see exactly what was going on, I watched from below, and presently saw a great swaying of tall grass and bushes as the young roadrunner "cautiously" made his way to the feeding station. Getting brave, he ventured out onto the rock to get his share of the seed and scraps of food which I had previously scattered. There was a further honking from up the hillside (a caution to be careful from his mother, possibly?), whereupon he scuttled over to the grassy verge of the incline. Here, he settled down happily behind two or three tall and sparse blades of grass, and proceeded to root around.

It was the funniest sight to see him "hiding" (as he no doubt thought) with his neck sticking out on one side, and his long tail on the other!

Last

month I sat at the typewriter and thought and stared and nothing came...so I did the only sensible thing ...called the Editor to ask if I could come over to see his garden. Scotty & Hazel have completely redesigned the plantings since last visit and it is even more attractive than before...they are enthusiastic about the rapid growth since they put most of their collection into the open ground. The Plastic House was full of brightspined beauties and if Scotty doesn't revamp his Christmas

letter soon I'll use it...for in it he told about the construction of his "greenhouse" in a most noteworthy way.

THE plant seeds are opened
by the night of the Earth;

The green buds are blossomed
by the power of the Air,

And all fruits are ripened
by the night of the Sun.

So opens the soul in the shrine
of the heart;

So blossoms Spirit power
in the Light of the World;

So ripens man's strength
in the glory Divine.

Dr. Rudolph Steiner



The mucilaginous substance that is obtained from the roots of Ariocarpus has been used as a glue for broken pottery.

Scotty had a number of excellent hanging baskets and one in particular was admirable for the ingenuity of the "basket" fashioned from a black plastic pipe elbow, about 5" in diameter...wooden stoppers in the ends to keep the Cissus quadrangularis under control with a chain from each end, caught with a single length of chain.

At the March meeting George Radwin announced the winners: For the cactus Madelyn Lee's Gymno denudum (cactus stalker...) - succulent Nellie Kennet's Caralluma subulata in bloom of course and for the Open Class, Scotty's Mam with fresh-as-spring yellow blossoms (whose first name we obviously didn't get.) A pleasure to see Audrey Justice back with us again, and Betty Baker at the Plant Exchange Table...where the most talked-about plant was Margaret Lickert's fringed-leaf Geranium.

Warren Buckner called our attention to the CSSA JOURNAL's centerfold featuring Madelyn Lee of Grigsbys C&S Farm...the cover is a magnificent color photo of a long-neglected Mam - crucigera...Warren said he had to pot down some of his plants for the library exhibit since the tables they will be under glass in is only 8" high...Scotty's gorgeous photos are from Japanese calendars that he's adding to the display...Loyal Joe will have specimen plants in wall cases...and the photos of Club Activities I promised will not be ready on time. That's the SAN DIEGO CACTUS & SUCCULENT SOCIETY's exhibit in our main DOWNTOWN LIBRARY all through the month of April.

FLOWER POWER APRIL 20th & 21st (Sat & Sun)

48th Standard Flower Show and Garden Tour presented by the Coronado Floral Association -- Admission only 50¢ -- under THE BIG TENTS in Spreckel's Park on Orange Avenue between 6th & 7th Streets.

Fran Marshall and Jack Schlotte co-chair the CACTUS & SUCCULENT Section with 35 Classes including DISH GARDENS and growing Succulents in natural WOODEN "containers" (Aged in the wood for at least one month). Now hear this: Entries will be accepted from 4-6:30 Friday the 19th of April and must be picked up by six p.m. Saturday - If you want to wait until the last minute to enter your specimen plants they will still be accepted from 7-9:30 SATURDAY MORNING - judging starts at 10:00. Fran was so taken by our exhibit last May that she wanted to enlarge the C&S section and hopes VERY MUCH to have a number of us enter. (No, you do not have to pay to enter a specimen, but during show hours of course you do & a BARGAIN.)

There's usually an Art Fair, a book and Nat'l Geographic sale as well as ARTISTIC ARRANGEMENTS and WILDFLOWER EXHIBITS - so if you can't go to Julian - come to Coronado!

RUTH STANTON...the short little round cuddly woman who always has special plants for sale...GIVES MANY MANY CUTTINGS AND PLANTS to Sophie to root for our Sales Table...Sophie wants you all to know that she's happy to have Ruth selling across the hall and so are we ...Ruth grows a lot from seed...we saw her garden and came away with treasures...noted that she has a lot of Crassulas in the shade of a fence but they looked great...she uses tweezers, outsize, and tongs, minisize for handling seedlings and really has a lot going for her ...to keep the bugs from entering the enlarged drainage holes of her containers, Ruth covers the bottoms and sides of the containers with screening...the better to grow more to give to SDC&SS and also to Quail Gardens...if you go to see her in Carlsbad take THE ELM AVENUE EXIT.....The Loylands brought home FLATS and FLATS from Ruths and then FLATS AND FLATS from CACTUS JACK Mergett's INDIAN ROCK NURSERY ...the hauling and rooting and potting and soil mixing and hauling that Sophie and Oliver nad Rickey do.....it's exhausting to contemplate...so give them a hand.

Before we're out of space as well as time - KITTY SABO, we all think you are WONDERFUL and you gave us a MAGNIFICENT program...I left humbled and sorry-to-say jealous - "What YOU can do with five days in Baja!" ... Baja California...Harry Crosby called it "One of the world's foremost rock piles..." watch for his book to be published this spring on cave paintings...Last year there were more reports of the Most Wildflowers in Bloom in 25 Years...this year, apparently, reports are, "I've seen more rattlesnakes than in 25 years!"...well, we'll have to see...

CALIFORNIA GARDEN MAGAZINE's editor, Craig Silgjord (296-1217) plans to feature C&S not only May of '75 for the Convention but this July-August issue as well...deadline is the first of June...he's a serious young man about a deadline...ANYONE for NOW IS THE TIME? That's a monthly feature of what-to-do for various plants, written by members of the plant societies...Lee & Floyd & both Ruth & Bill Nelson have done it...and so have I -- See you in May...

'Spice' of Espinas y Flores

Ellie WACHER, Las Vegas:

"I really love 'Espinas y Flores'. It's a good bulletin! Anita Heywood's story 'A Greenhouse--Home of Plants and their Enemies' was so interesting and real. My greenhouse is only about 9 x 14'. My husband made it of redwood and corrugated fiberglass. It is very attractive and durable. And it was made to withstand the high winds of Nevada."

Audrey Johnson's 'An Englishman's Home is his Castle' was well-written and very interesting. I love these 'specialties' in Espinas y Flores. And Cactus-of-the-Month too.

Francis J. BORG, Malta:

"Last month a postage stamp was issued locally to commemorate the botanist Dr. John Borg whose book on cacti is known to everyone. Borg's widow, once the honorable President of our Society, died one week before the stamp was issued. It was a tragic event since she really was looking forward to the new Borg stamp.

"I've been busy transplanting all my plants this past month (February). I discovered to my dismay that many plants had practically no roots--or very few if any at all. The blame goes to the insecticide 'ROGOR' which I used against root mealy. No doubt it eliminated the mealy bug, there are no sign of them, but it was a great disappointment to find the insecticide also affected plant roots. I'll be very careful in the future not to use any insecticide--if possible."

Joe WERLING, Los Angeles:

"Last night, after spending the day setting up the daffodil show at Descanso, I began to catch up on my reading. Lo, and behold, the March issue of Espinas y Flores had not arrived, my last issue was "Febrero".

"What happened?" Said I to Irma. "Did you write a check to the San Diego Cactus & Succulent Society?" After some minutes checking, the result was negative. Of course I always have Irma to blame when things go wrong.

(Joe: Your name has been scratched off our "neglected to renew" list. The March issue is enroute, and of course we have a label for this Abril issue. Would you read the last line of your note again, then go look in the mirror? . . . Ye Ed)

Del MONTAGUE, Riverside, CA has put into print and circulation a very imaginative and correct 'plant puzzle'. Some succulent plants have been taken apart and their parts hidden in sentences. Finding and recognizing them is your sport. The nine parts may be found in the following sentences: The 'parts' or 'plants' are: 1) areole, 2) cactus, 3) cercus, 4) cotyledon, 5) graft, 6) nipple, 7) opuntia, 8) pad and 9) tubercle. Have fun!

- 1 -- The coach will ask him to punt, I assume.
- 2 -- Medicine time means epicac tussel to Tom.
- 3 -- We are most sincere users of their product.
- 4 -- The cactaceae role is to bring pleasure to all cactus nuts.
- 5 -- Harry's Papa did not join the club.
- 6 -- The big raft would not float.
- 7 -- The leader, Bill Coty, led on to the finish.
- 8 -- Eat the catnip please, Kitty.
- 9 -- The Peniocereus greggi had a large tuber clear down to the bottom of the pot.

(Del, you're very generous, giving us a month to solve your puzzle. . . .Ye Ed)

(PS: Is Art still working on it?)

BROOKLYN BOTANIC GARDEN, Brooklyn, New York:

February 28, 1974

"Dear Dr. Corliss:

Dick Jaynes and Carl Clayberg of the Connecticut Agricultural Experiment Station have sent us the manuscripts for the new Handbook on Breeding Plants for Home and Garden. On behalf of the Botanic Garden please let me express our appreciation to you for being a part of this issue. I have read your article on Cactus with special interest, and am sure that our readers are going to enjoy and learn from it, too.

As it looks now, the Handbook will be published in May and we will be sending you author-courtesy copies as soon as they arrive from the printer. It will be in print about ten years, with an occasional updating, and will find readers in all fifty states and more than eighty countries overseas. This will be the first--and perhaps only--introduction to plant breeding for many home gardeners, so the issue takes on a special meaning.

Again, thank you for taking the time and effort to help us out with this important new Handbook.

Sincerely,

Frederick McGourty, Jr., Editor
PLANTS & GARDENS

Dieter HELM, Mainz, West Germany:

March 13, 1974

Dear Mr. Scott:

In your letter of January 26th you wrote: 'I shall send you a copy of our February bulletin so that you may judge for yourself whether or not you wish to subscribe to it.' Well, I have been waiting for this copy until now and I am still waiting to subscribe* to your bulletin. I think you forgot to send the copy. I would be pleased if you can find a place for the inclosed article, my first in English:

CAN CACTI ABSORB WATER WITH THEIR EPIDERMIS?

For cacti growing at the Chilean beach or in Mexico's deserts, it would be very useful to have structures which are able to absorb the nightly moisture. Everyone knows that in deserts temperatures sink to low levels at night which means that moisture in the atmosphere will condense into what is called 'dew'. If cacti can assimilate the condensed moisture, those which are able to do so will have the benefit over those which cannot. The former have better chances to grow and increase.

It would be incredible to believe that structures had not been produced by nature for the purpose of absorbing condensed moisture in cacti and other desert plants. I am certain such structures exist. While working at "South American Plant Imprts OHG" in Wiesbaden-Erbenheim, Germany, I observed that some cacti absorbed water drops like a sponge. I made experiments with my own cacti and concluded that the following species do accomplish absorption: Gymnocalycium asterias, Islaya bicolor, Submatucana madisoniorum, Ariocarpus kotschoubeyanus, Aztekium ritterii, Encephalocarpus strobiliformis, Pelecyphora asseliformis--all collected plants.

All the above-named species have a dim, grey and, in some cases, granular epidermis. Astrophytums and Uebelmannias can absorb water with the 'flocks' (vegetable fibers) on their epidermis.

It would be helpful to find an answer to the question of whether or not Neogomesia agavoides belongs to the genus Ariocarpus. Absorption of condensation might provide the answer.

(Dieter: Your check arrived. All back copies of 'EyF' are enroute. About absorption, be sure to read pages 175-185 of the CACTUS & SUCCULENT JOURNAL of AMERICA JUL-AUG 1973. . .Ye Ed)

TWO SHORT STORIES:

- 1) Three Garden Visits, and
2) An Agave and a Rat.

Palomar Cactus & Succulent Society demonstrated with a flair at their March meeting on the 16th that there are friends to make and interesting and exciting gardens to be visited in the County.

The group gathered at an appointed hour at the San Marcos garden preparatory to visiting three members' gardens and Avery's Cactus Nursery. It was a larger than usual cactavan led by Emery Cotten in his little red car over a very exciting garden tour on a bright and sunny afternoon.

Palomar's Cactus Garden at San Marcos is a revelation. Everyone was pleased and surprised at what has been achieved in the care and variety of plants, and the plants' responses. It represents good planning and a lot of work--and a purpose. Later in the summer one will be able to enjoy many of the specimen plants at Cal Expo at Del Mar. The plants appear to be awaiting the occasion.

There is a strange and unusual animal-plant relationship at the garden which evoked the interest and speculation of everyone. Near the garden's entrance is a large Agave, about 10 feet high and with lower leaves approaching six feet. A rat has staked a claim to its base and has collected protective material such as is found in a cactus garden from which to build its home at the base of the Agave.

It would appear that the rat's plant-of-abode is also its dinner plate and single item diet. The rat isn't anti-Agave, only pro-rat. How convenient for it to appear from a concealed entrance; hop from leaf to leaf without risking a tail to a hawk; select one leaf for a perch and another for a meal; enjoy an unmolested lunch; and repeat the program day after day. Judging by ageing teeth marks and volume of Agave leaves consumed, the rat has been 'at home' for a long time. Some lower leaves were drooping. They did not have sufficient attachment to support their outer bulk.

The Agave might better be called a 'rat happening', perhaps one-of-a-kind, something we had not witnessed previously. One cannot speculate at this time which will survive, the Agave or the rodent. Each has an advantage, once it sends up a flower stalk, the rodent will have to look for new pastures, and that is in the Agave's favor even at the cost of its existence. The rat, being a 'tenant' may depart at will.

It's the rat's way of saying: "Eat your Agave and live in it too." Or, if Betty Wollrich, Helen Hegyi and Mildred Gregory will counsel with the old master Charles Harbison, they may evolve a scheme whereby they can induce the rodent to switch from an Agave diet to one of weeds. Espinas y Flores will be looking forward to receiving the second Chapter of this rat tale from one of the above quartet.

Let's get back with the cactavan. Emery led us to 1001 South Hale, a mobile home complex where he and a neighbor Bill Kamrath enjoy a common hobby. Every visitor on Saturday was delighted to see a surprisingly large variety of well-cared-for plants, some in the ground, others in pots and others hanging--all doing unbelievably well. Specimen plants on the street side could be interpreted as ads for a rewarding activity.

The group had to be 'uprooted' from the Cotten-Kamrath cactivities to get underway to Helen Hegyi's hilltop plantarium at 110 Howell Heights Drive. People in the valley to the west don't know what they're missing. Helen has just the right number of plants, all-around growing areas, and the know-how that makes for response in plants. Did we hear plants say: "Come back and see us soon?"

SAN DIEGO CACTUS & SUCCULENT SOCIETY
PALOMAR CACTUS & SUCCULENT SOCIETY
IMPERIAL VALLEY CACTUS & SUCCULENT SOCIETY and the

CACTUS & SUCCULENT SOCIETY OF AMERICA will be as one in 1975

The SIXTEENTH BIENNIAL CONVENTION of CSSA is right around the turn of the year----May 12 to 16, 1975----and time is relentless!

The three above named societies and the national society have the responsibility for making 1975 the 'best yet' convention. It CAN and it WILL be done !!

In order for a convention to function smoothly, there must be a number of dedicated individuals who are willing and anxious to serve as committee chairmen (or chairpeople if you prefer) to take the lead, with helpers, and work together toward a common goal to make for a smooth operation.

COMMITTEE spots and Society FUNCTIONS are listed alphabetically below.

Study the list carefully and thoughtfully, select an activity which is consistent with your abilities, interests, talents and time and get together with anyone of the three 'Coordinators' named below. April meeting is a good time.

COORDINATORS: Dr. Philip G. CORLISS, H. Warren BUCKNER and YE ED

COMMITTEES: Find your spot.

BUDGET, someone has to balance income and outgo, debit or credit \$ \$ \$
(See TREASURER last on list)

BUS TRIP LEADERS for Convention bus trips. . .only about six open.

DECORATIONS for exhibit area, sales and hospitality room.

DOOR PRIZES for banquets and Society functions. You may be the winner.

ENTERTAINMENT of a type and at the time of the many varied programs.

EXHIBITS--arts, educational, handicrafts, paintings, plants, etc.

FACILITIES--arrange for which area or room is used for what--and when. Public address system, speech recording.

GARDEN VISITS on first Sunday. Lead a group and enjoy the trip too.

HOSTS for first night banquet and two others

HOUSING--assist those who have special needs.

MASTER OR CEREMONIES for all official activities and occasions. Line forms at the right.

PHOTOGRAPHER: You could make your hobby cover the convention.

PROGRAM for the Convention. This most important assignment of the event will be headed by Chas. Glass.

PUBLICITY--giving out with facts about San Diego and the Convention in all appropriate mediums, TV, Newspapers, publications prior to the event.

RECEPTION & HOSPITALITY to make everyone feel at home and very welcome.

REGALEMENT: Our Club has a reputation for this activity...we shall continue.

REGISTRATION by mail months beforehand and on Sunday and Monday. Pat MOONEY will need help.

SALES--plants and other items. Sophie and Oliver LOYLAND will need help.. in addition to Ricky LATIMER.

TRANSPORTATION--travel info and help for visitors.

TREASURER...who likes to count & change?
'E y F' April 1974

NOTOCACTUS (Schumann) Berger, 1921

Cactus-of-the-Month

Dr. George E Radwin

"Notocactus", the generic name of this group means "southern cactus" and its distribution includes Argentina, Uruguay, Southern Brazil and Paraguay.

Originally introduced as a subgenus of Echinocactus, Notocactus was later confused with Malacocarpus Britton & Rose, from which it differs mainly in having dry, rather than fleshy fruits, by their placing Notocactus species in their genus.

Finally recognized as a full genus, Notocactus was then subdivided by Backeberg, who split off Eriocactus (Notocactus leninghausii, N. schumannianus, etc.) and Brasilicactus (Notocactus haselbergii); now both of these groups, together with Malacocarpus (proper name according to the rules of botanical nomenclature is Wigginsia) are considered subgenera of Notocactus.

Several groups of Notocactus species are considered to be clusters of subspecies or varieties and many species names may be placed in synonymy when adequate names are available to separate these closely related forms.

The plants are small to moderately large, globose or cylindrical and with many spiny ribs. The flowers are generally showy and are almost all yellow, although a few species have red, orange or violet blooms. The fruits are generally dry but in Wigginsia the fruits are soft and fleshy.

Notocactus are largely meadow plants but some species are also found in rolling foothill country. They are primarily temperate climate plants and many species can tolerate temperatures as low as 20°F. but most thrive at a moderate (70-90°F.) temperature range.

They grow best in moderately rich, well-drained soils and although they seem to prefer copious sunlight, it is wise to keep them well watered during the warmest periods.

The description of many new species since 1966 has seen a great increase in collector interest in these attractive, easy to grow plants.

Some of the better known species are N. haselbergii, N. leninghausii, N. mamulosus, N. ottonis and N. scopa. Some of the more spectacular recent introductions are:

<u>N. buiningii</u>	<u>N. claviceps</u>	<u>N. crassigibbus</u>
<u>N. horsti</u>	<u>N. magnificus</u>	<u>N. uebelmannianus</u>

REF: Bleck, M., 1972

Notocactus (Schumann) Berger. Cactus & Succulent Journal
43 (1): 192-196

Buining, A. F. H., 1968

A new species of Notocactus". Kakteen und andere Sukkulen-
ten 19(9):175-176

NOTE: "Notocactus" perhaps affords one the opportunity to understand the complexity of the "Great Cactus Naming Game". For example Britton & Rose list nine; Backeberg names sixteen; Borg settles for 25. If you wish to really become conversant look into the sixty-three appearing in the N. M. Cactus Research catalog.

• "IS GREEN ALGAE HARMFUL?" someone asks. •

• Mr. "B" thinks and writes a few words: •

QUOTE:

"First, its name: "Alga" is singular, "algae" is plural.

Algae usually is encountered as a green, slimy, sticky, unsightly scum which may cover the water surface or the surfaces of other plants, rocks, sticks, or any object in the water. Water is its bailiwick.

Algae are the simplest form of true plants. They are phylum "Thallophyta". It is any of numerous motile (moving or capable of moving spontaneously) or nonmotile plants. They are in the first division of the vegetative community. It ranges from unicellular, usually microscopic forms to multicellular forms, sometimes 100 feet or more in length. It occurs in fresh or salt water, or on or in other organisms or in the soil, on rocks, trees or other plants.

Algae can manufacture their own food by means of the green chlorophyll pigments which trap the energy of sunlight. Keep that in mind, we will return to it in a later paragraph.

Algae appears in brilliant colors in the waters of some of our streams and lakes. The vivid colors make one suspicious of the usefulness of the water for human consumption. Who likes to drink water from a lake with a bright green covering of algae? Most unpalatable, maybe it would be like drinking bright green syrup.

Algae comes in several colors, primarily green, but often red, brown, yellow and orange. Colors other than green mask the green color which is the chlorophyll necessary for production of food in higher plant life.

Algae must have light or it will perish, it does not survive in darkness. Rain water collected and kept in tightly covered, light-free containers remains free of algae for as long as it is kept so covered and in darkness.

Algae is controlled with a copper sulphate solution. The simplest method of control is to purchase such a solution from your garden store which contains the chemical needed. Always follow directions carefully. Make it a habit to use less, not more than directions state.

Favorable conditions for growth of seedlings and other plants in your garden include heat, light and moisture. The very same conditions are conducive to the growth of algae. That's why it is more in evidence in the summer months. If conditions are favorable it multiplies rapidly until it covers the water surface, plants, etc. It may be introduced into your seed beds or garden by watering with an algae-containing water. If unchecked it may cause the plants to die. If the soil is "dried out" in an effort to control the algae, the algae may be controlled but the other plants perish too.

A bit of humor in passing: If the cactus name givers had been on hand when algae was named, it might have been called "algus" and "algi". A name is a name, is a name, is a name."

S U C C U L E N T P L A N T E X H I B I T

WHERE ? At the Downtown Library, between 7th and 8th on E Street
WHEN ? April 1st to May 1st -- one full month -- Library opens at 10 o'clock
and closes at 9 p.m. Closed Sundays.

CLUB EFFORT FOR APRIL: The April exhibit at the Library is the Club's activity and effort for April. At this time let's mention the MAY EFFORT: OPEN HOUSE at Casa del Prado, May 11th and 12th. (See page 3) June and July effort: Cal Expo at Del Mar. More about these next month.

THE COMMITTEE: Any worthwhile activity requires leaders with dedication, knowhow, and energy. The trio comprising the committee consists of Pres. Loyal Joe BIBBEY, H. Warren BUCKNER and Dr. Leroy N. PHELPS. They not only are "the committee," but they are exhibitors as well.

The Committee has set its sights on 18 glass enclosed cases, eight floor cases and 10 wall cases in which will be displayed the 'activities' of the 'Cactus Club' as it generally is called. Wall cases measure 14" high, 30" long and 7½" deep. Floor cases are 2 x 5 feet and 7½" deep. Depth of cases precludes display of many 'specimen' plants. Specimen plants, like people, when fed generously and well cared for, have a tendency to become dependent, and bulky as well as beautiful.

At this point in time, a week prior to installation of the exhibits, we can report that the exhibit will be 3-dimensional: appealing, attractive and educational. The committee has been concerned about plant welfare, so subs or stand-ins, or substitutes are included in the plans. Thirty days inside a building where the neighbors consist of thousands of volumes of bound volumes, is a long time in the life of a potted plant. Joe is giving this a lot of thought. Needless to say he is on the side of the plants. He knows they may not be as comfortable and relaxed as they normally are in Imperial Beach.

Club members who are setting up specialized exhibits are:

Nibby KLINEFELTER: Nibby's exhibit will reveal "Club Activities". It should be particularly attractive and appropriate since no one in the Club is endowed with as much "know-how and experience" when it comes to exhibiting than. . . .or let's put it another way, Nibby excels. If you must convince yourself, that is very simple. Go see the exhibit in April

H. Warren BUCKNER: Warren has been commuting furiously between Lemon Grove, Pacific Highway, Downtown and Imperial Beach making notes, organizing and gathering material for an X-number* of cases. From what we've seen of his early efforts, the results have an advance rating of 'excellent'

VEEP Martin MOONEY is 'advance publicity agent' for the Club's Open House in May at Casa del Prado. (Page 3) Martin is handicapped in confining his efforts to an enclosed glass case. He goes in for overall accuracy, detail and perfection. That's three dimensions--there ain't any more.

Dr. Leroy N. PHELPS: Info about the 'Phelp's Exhibit' is not available at the time of this writing, but from past experience we know it will be attractive and instructive and unusual. Let's hazard six guesses about its content:

- 1) BROMELIADS, 2) BONSAI, 3) TROPICAL FISH, 4) PALMS, 5) SURPRISE, and
- 6) OTHER. That should have Lee 'cornered' 'hermed in' or 'surrounded'.

S U C C U L E N T P L A N T E X H I B I T -- continued from page 13

PUBLICATIONS: Yo Ed has collected copies of publications relating to succulent plants and if you haven't heard about two of them, a visit to the Library in April is a 'must'.

NO. 1 CACTUS & SUCCULENT PUBLICATION (in the world) is the CACTUS & SUCCULENT JOURNAL published by Abbey Garden Press of Santa Barbara. Three of the Journals reveal most attractive color photographs of outstanding plants. The third Journal (opened) reveals color and humor inside the pages.

NO. 1-a CACTUS & SUCCULENT PUBLICATION (in Casa del Prado) is 'ESPINAS Y FLORES' which is what you have in your hands and are reading at the moment. If you would like to have it come to your home each month all you have to do is join the San Diego Cactus & Succulent Society and get on its mailing list. The cost is nominal, only \$5.00 (but don't be assured it is going to remain there) cost of the bulletin in 1973 exceeded income from memberships and the situation is continuing in 1974. Address on back sheet.

(With the recent postage increase in mind, and threats of additional increases in the future, our member O. Ed Miller is giving some thought to having his bulletin delivered by carrier pigeon--except that he already has too many pigeons on Bluebird Lane--neighbor's pigeons, that is.)

NO. 3 MISCELLANEOUS PUBLICATIONS. The exhibit contains random booklets relating to our hobby. Probably the best known of all is: "CACTUS & SUCCULENTS" -- AND HOW TO GROW THEM by Scott E. Haselton. It is available from Abbey Garden Press or the Desert Botanical Garden in Phoenix. It's a booklet everyone should have.

SINCE THE EXHIBIT will contain a number of the native cacti of San Diego County, the following list is supplied as given in the booklet by that name written by George Lindsay. Everyone should make it a point to become familiar with native plants.

* * * * * CACTI OF SAN DIEGO COUNTY * * * * *

- | | |
|--|--|
| Bergerocactus emoryi | Opuntia megacarpa (mountain prickly pear) |
| Echinocereus engelmannii (hedgehog) | Opuntia occidentalis (prickly pear) |
| Echinocereus munzii | Opuntia occidentalis piercei (desert prickly pear) |
| Ferocactus acanthodes (desert barrel) | Opuntia parryi (valley cholla) |
| Ferocactus viridescens (coast barrel) | Opuntia prolifera (coast cholla)* |
| Mammillaria dioica (pincushion, fishhook) | Opuntia ramosissima (pencil cactus)* |
| Mammillaria dioica incerta | Opuntia serpentina (snake cholla)* |
| Mammillaria tetrancistra (desert fishhook) | * with sheathed spines. |
| Opuntia acanthocarpa ganderi | 'tuna' means the prickly pear fruit |
| Opuntia basilaris (beaver tail) | |
| Opuntia basilaris ramosa | 'nopalitas' is Mexican for the tender new pads used as food. |
| Opuntia bigelovii (jumping cholla)* | |
| Opuntia chlorotica (golden prickly pear) | |
| Opuntia echinocarpa (silver cholla)* | |
| Opuntia echinocarpa parkeri | Some of these cacti as well as photos of them will be on display at the Library exhibit. |
| Opuntia fosbergii | |
| Opuntia littoralis (coast prickly pear) | |

S E E D S O U R C E S

CACTI AND OTHER SUCCULENTS

- - - - - Dr. Philip G. Corliss - - - - -

This is the best time of the year to plant seeds of cacti and other succulents. Most books dealing with succulent plants have a chapter or more of advice. We do not presume in this column to question such authority nor to insert our own preferred methods. Success seems to be a matter of individual accomplishment.

Whatever cultural procedure you adopt, it is important to use fresh and viable seeds. Many cactus dealers offer seeds from their own plants. Outstanding examples are the offerings to the members of THE EXOTIC COLLECTION and to those who subscribe to the monthly plant offerings of HOLLY GATE NURSERIES, both in England.

Collected seeds from South America (and the other Americas) are offered by several European dealers. When you consider that the seeds of various genera mature at different seasons, and they must be collected and shipped across the ocean, it would seem desirable to get them directly from those who collect them in the Americas, if possible.

Sr. Karel Knize is one of the largest seed and plant dealers in the succulent world. He sold over 50 MILLION cactus seeds last year to European customers. His prices for seed packets are very modest and his lists contain many of the rarest South American species, some of which were his discoveries.

Write for his seed lists at the following address:

South American Plants, S. A., P.O. Box 10248, Colmena 51
Lima, Peru

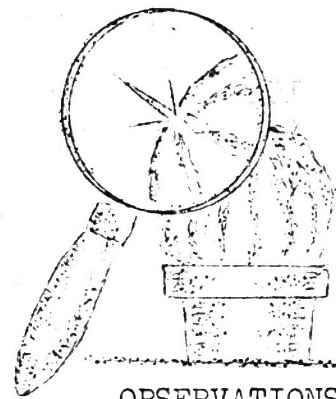
To many people the most fascinating part of seed raising is to use seeds from crosses one has made on his own plants, either for species or in the search for desirable hybrids.

Another important facet in raising cacti (and other succulents) from seed is to add to your collection plants that are not offered by dealers. There is one seed list that stands head and shoulders above all others in this respect. It is:

New Mexico Cactus Research
P. O. Box 787
Belen, New Mexico 87002

Their new list has just come to hand and it offers well over 3,200 different species of succulent plant seeds, more than 2,300 of which are of cactus. Most packets contain 20 to 30 seeds and sell for 25¢.

I have been a "cardiac cripple" for over half a year now, and I would like to take this opportunity to thank the very kind people in the Society who have sent beautiful messages of friendship and sympathy. I am trying hard to get well and my principal exertion will be to try to continue to write these columns, if I can make them worthy of the space required. Next month (May) is the time for my regular annual recommendations of plant sources.



OBSERVATIONS of
Cacto-Phil CORLISS

S P A N I S H E X P L O R A T I O N S -- 1519

CORTEZ, the AZTECS and AGAVES

--- Pat RILEY, Hamilton, New Zealand ---

In 1519 the Spanish explorer Cortez, with a band of approximately 500 men set out from Vera Cruz on the eastern coast of the land we now know as Mexico. His aim was to win the people of the unexplored land to Christendom and also to claim the lands for Spain.

The Cortez party travelled westward from the tropical swamplands called "tierra caliente", through the more pleasant temperate zone and then over the high mountain passes to the central plateau of Mexico. The hardships were great and the battles fierce and bloody.

Although the Cortez party was fighting so called "savages", the Spaniards were continually surprised at the high standard of civilization of the Mexican people whom they referred to as "Aztéc", even though the Mexican nation contained many different tribes.

In a land blessed with an abundance of plants, fruits, flowers and vegetables, the natives enjoyed a pleasant way of life. Indeed, the Spaniards very soon began to enjoy some of the strange plant foods such as the potato and tomato.

Everywhere they travelled, they found one plant dominated the scene and it was grown on a large scale. The plant was "maguey" or as we know it, "Agave". The approach to every settlement or village was marked by groves of the plant which the natives carefully tended and harvested. The Agave later became known to travellers as the "Papyrus of the Aztecs" as it afforded the natives so many useful products, as was the case of the Egyptian plant "Papyrus" in the area of the Mediterranean.

The bruised leaves yielded a 'paste' which was used in the manufacture of a high quality paper. Although the Aztecs used several different materials for writing purposes, cloth and skins for example, their most prized one was "amatl". It was comparable to the famous paper made by the Egyptians from papyrus. When it was properly dressed and polished it was softer and more beautiful than parchment.

Records were kept and historical documents were recorded on this paper in the form of hieroglyphics and were stored for posterity. Maguey paper, known as "Amatl" is represented on the Aztec calendar, or sun stone. This massive stone with a diameter of 3.60 metres and a weight of 25 tons was seen and examined by the Spaniards in Mexico City in 1519. It later disappeared and was later rediscovered buried in Mexico City on December 17, 1760. It is currently on display in the National Museum of Archeology.

The juice of the Agave was fermented to become the drink "pulque". The Aztecs worshipped over 100 different Gods, and they considerably found a spot for one God of "Pulque". Omotochli was his name and people travelled great distances to pay homage to his statue.

The Aztecs maintained strict moral standards, sobriety being one of them and "pulque" was drunk only on festive occasions. With its low alcoholic content, it was necessary to drink a quantity to become drunk, which privilege was usually reserved for the older generation.

A popular drink was "chocolatle". . . more about which will appear later.

SAN DIEGO CACTUS & SUCCULENT SOCIETY

Affiliate of the
Cactus & Succulent Society of America

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.
MARCH PROGRAM: Augie Pfeiffer
 Ex-President -- "Selected Slides of Plants in My
 Garden -- Cacti and Succulents -- Before Flowering and In Flower."

REGALEMENT -- MARCH: Our appreciation and thanks for a super-regale-
 ment at the last meeting go to:
 C. L. BENBOW, Elvira BIBBEY, Neta COTTEN, Rose D'ATTILIO, Jean
 HAPEMAN, Leta HAPEMAN, Helen HEGYI, Audrey JOHNSON, Ruth LARSON
 and Hazel SCOTT.

Page I N T H I S I S S U E

1 -- "Family Portrait" Cartoon by Ye Ed
 2 -- Edith WERNER: New books and recent gifts to the Library
 "Windier than Washington D. C. ?? Ye Ed
 3 -- MAY OPEN HOUSE at Casa del Prado, May 11 and 12
 4 -- Anthony D'ATTILIO: "The Seashore Life Coloring Book" of shallow
 water plants and animals for youngsters.
 4 -- Audrey JOHNSON, Escondido: "Hand Bag Cactus" and "My Timid Friend,
 the Roadrunner."
 5-6 -- Nibbi KLINEFELTER: "Nibbi's NOTEBOOK (people and plants and places)
 7 -- COMMUNICATIONS: Ellie WACKER, Las Vegas; Francis J. BORG, Malta;
 Joe WERLING, Los Angeles; Del MONTAGUE, Riverside.
 8 -- COMMUNICATIONS: Brooklyn Botanic Garden and Dieter HELM, Mainz, Germany
 9 -- TWO SHORT STORIES: Three Garden Visits and An Agave & a Rat. . .Ye Ed
 10 -- CSSA BIENNIAL CONVENTION, May 12-16, 1975 - - - COMMITTEES
 11 -- Dr. George E. RADWIN: Cactus-of-the-Month -- NOTOCACTUS
 12 -- IS GREEN ALGAE HARMFUL? Mr. B's thoughts and words.
 13 -- SUCCULENT PLANT EXHIBIT at the Downtown Library during April, con-
 tinued on page 14
 14 -- CACTI OF SAN DIEGO COUNTY from George LINDSAY'S book of the same name
 15 -- Dr. Philip G. CORLISS: "SEED SOURCES, Cacti & Other Succulents
 16 -- Pat RILEY, Hamilton, New Zealand "Cortez, the Aztecs and Agaves"
 17 -- OFFICERS; MARCH PROGRAM; MARCH REGALEMENT and IN THIS ISSUE

SUCCULENT-OF-THE-MONTH for April is HAWORTHIA. Madelyn LEE will be
 writing the story of the "S/M" and describing the plants at meetings
 beginning in April, and also will have a list of the plants for the
 remaining months of the year for the next issue of 'E y F'.

Walter R. Scott

3430 Wilshire Ter.
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