CACTUS CAPITAL CHATTER

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY
Affiliate of Cactus and Succulent Society of America, Inc.

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"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."

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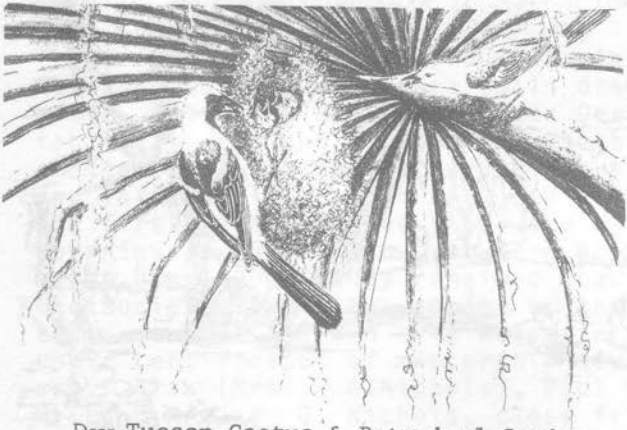

Dear Tucson Cactus & Botanical Society:
Each contribution from our members
has special meaning. Your generous gift of $50.00
in response to our Annual Giving appeal is deeply
appreciated and will help greatly in maintaining
and enriching the quality of your living Desert Museum.

Many thanks from all of us.

Sincerely,

Holt Bodinson
Director
Arizona-Sonora Desert Museum

JOE BRICK AND HIS NEW CACTUS PLANT

Joe writes us that he is very thrilled over becoming the owner of a cactus plant that he had never seen before. It has been identified to him as a Monstrose Astrophytum myriostigma. Its texture is the same as that of a normal myriostigma. A great number of malformed-looking warts completely cover it. Through a magnifying glass, they show the same five segments as the main head. Its three branches are on a common stem. This plant is completely free of spines. It is grafted on a euphorbia.

TRICHOCEREUS AND HELIANTHOCEREUS

Mrs. W. H. (Christa) Roberts of Coolidge, Arizona is a friend of our member, Mrs. Hildegard Nase. She visits us at times. She is an experienced cactophile and a skilled translator. We thank her very much for this excellent contribution to CACTUS CAPITAL CHATTER.

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Published: "Kakteen und andere Sukkulenten"
volume 1975, page 260

Translated: From the German language by
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It's perplexing, finding time and time again how little known the beautiful Hybrids of this genus are. Cacti lovers, having seen these unique plants flower in their collections, are enthused with the size of the blooms and the brilliance of color displayed. But then, who does not know the robust Trichocereus cacti in their role as grafting stock. Trichocereus pachanoi, bridgesii and macrogonus, just to name three of the most used species, are surely represented in every collection. However, in order to avoid giving the impression of "not to be with it", it is a stylish fad nowadays to keep collected plants of Ariocarpus, Neochilenia, Parodia or Matucana. Also belonging to this category are the genera of Copiapoa, Neoporteria, Uebelmannia and Sulcorebutia. But very few people get the idea to just for once grow a Trichocereus to flowering size instead of using it for grafting stock only. This seldom has anything to do with available space as even in spacious greenhouses one rarely sees Trichocereus cacti, despite the fact that in order to be able to flower, by far not all of them have to attain a height of up to two meters. We should really think about it; is it not better to give free reign to what we actually desire in plants, instead of putting so much emphasis on looking for the names of new species in the cacti catalogs? These species frequently are not nearly as new as the name seems to indicate. I most assuredly know about the stimulus and the charm of a new import, of a rare species, but if one has experience in how derogatory a manner many a beautiful Hybrid is treated, then I do feel compelled to put a word in for this hobby, and particularly for the Trichocerei Hybrids. The number of cacti-fanciers committed to Trichocerei Hybrids does not date from "to-day". Cacti "breeders", in years past, have tried to cross the robust and strongly growing Trichocerei of the large white blossoms with related genera, like Helianthocereus, Lobivia, Echinopsis etc., aiming at surpassing the starter plants in beauty of habitus and flower.

One can consider Helianthocereus with its mostly colored, diurnal flowers as the closest relative to Trichocereus. The relationship is so close that Backeberg, who established Helianthocereus in the first place, has already reclassified it as Trichocereus.

Amongst the friends of Trichocereus-Hybrids the genus Helianthocereus is still justified, even though one should like to say "no" to this, because it does tend to bastardize the two genera. A bloom diameter of 14cm and more can be expected of a good Trichocereus Hybrid. For example, the large blossoms of Trichocereus candicans and Trichocereus thelegonus come to mind here. Hybrids, dominated by hereditary factors of Helianthocereus, show a flower diameter of about 8 to 12cm. Here, one has mainly used Helianthocereus grandiflorus, huascha and varieties, and "Vatter 15" in different colors, the latter probably being a Hybrid already.

To my knowledge, Robert Graeser of Nuernberg applied himself most extensively to Trichocerei Hybrids, mostly using Echinopsis eyriesii var. grandiflora as the father plant. (Kakteen und andere Sukkulenten, December 1953). At the time, the mother plants Graeser used comprised Trichocereus candicans, spachianus, thelegonus and pachanoi. The two most eminent crosses here are Trichocereus candicans x Echinopsis eyriesii var. grandiflora and Trichocereus thelegonus x Echinopsis eyriesii var. grandiflora. In both forms of Hybrids Trichocereus is dominant as to body build and rib number, Echinopsis eyriesii var. grandiflora shows up in the spines. Color of flowers was intermediary in both Hybrids, the first Hybrid showing a tendency towards white, the second leaning more towards the pink flower of Echinopsis eyriesii var. grandiflora. The flower diameter of both Hybrids is approximately 20cm. The flowers themselves have the typical Trichocereus form, only the edges of the inner petals, by way of new hereditary factors, are slightly fringed.

In the meantime, the Hybrid Trichocereus candicans x Echinopsis eyriesii var. grandiflora is represented in a few collections, still unnamed, which is undeserving for this beautiful and good cultivar.

I therefore named it "Noris". It is always a ticklish matter, this naming of Hybrids, the cultivators themselves being somewhat neglectful in this regard. Some cultivars (especially Echinopsis Hybrids) have therefore been repeatedly named.

The Hybrid Trichocereus thelegonus x Echinopsis eyriesii var. grandiflora (already known as "Theleflora") must be considered in habitus as one of the most beautiful. It could be admired in full bloom in the Hoesslinger collection on occasion of the annual 1974 meeting of the German Cactus Society at Nuernberg.

Grafts of this Hybrid can attain ability to bloom already upon having reached a height of 15cm.

A few years later Graeser introduced two other Trichocereus Hybrids (Kakteen und andere Sukkulenten, September, 1957). One of them is the cross of Trichocereus thelegonus x Echinopsis kermesina, from which derives my Trichocereus-Hybrid "Siegelsdorf", which was introduced in "Kakteen und andere Sukkulenten", December 1973 issue. These plants attain blooming ability at an early age, proving thereby that it is possible to inbreed that attribute of Echinopsis (even when used as the father plant).

It has to be mentioned at this point that Trichocereus Hybrids, true to their nature, cannot flower during the first few years. The exceptions are seedlings grafted on Eriocereus jusbertii, which are later re-grafted on robust Trichocereus or Opuntia bergeriana stocks. As a rule, most of them attain blooming ability at a height of 20cm, the crosses with Helianthocereus at even approximately 10cm.

Interesting things can be reported concerning Graeser's second Hybrid, namely Aporacactus flagelliformis x Trichocereus candicans. The parent plants are already something special. The larger trunk diameter of this Hybrid is a remarkable 15cm, something not to be expected when starting with Aporocactus-1.5cm, and Trichocereus-12cm. The delft-pink colored flower, diameter 15cm, has slightly waved petals, seamed on the edges with dark-red, narrow stripes. These new and pleasingly evident hereditary marks assert themselves also in Trichocereus Hybrid "Graeser", the latter being, I guess, the most beautiful Trichocereus Hybrid so far. It was introduced in "Kakteen und andere Sukkulenten", January, 1967, by picture and with exact lineage given.

This Hybrid is the result of cross-breeding a "Schigra" Hybrid with the previously mentioned "flagelliformis x candicans" Hybrid. Schigra is a cross between Trichocereus schickendantzii and Helianthocereus grandiflorus. A number of Helianthocereus-Hybrids in different color nuances from red to pink are presently named Schigra. Most of them reach, as already previously mentioned, a flower diameter of only 8 to 12cm, but have to be mentioned again and again in connection with Trichocereus-Hybrids, as they have been crossed frequently with large-flowered Trichocerei, and also having been crossed amongst themselves, they are even in the F 2 and F 3 generation able to show larger flowers than their original parents. It is my opinion that they also can therefore be considered Trichocereus-Hybrids, having a flower diameter which starts at 14cm.

One of the most beautiful Helianthocereus-Hybrids is "Kaffee", also cultivated by Graeser. This peculiar name, however, fails to exactly hit the color of the flower." Orange-red----salmon-brownish" would be closer to the mark.

At any rate, it's a beautiful cultivar with a flower diameter of 12cm. Unfortunately, we only know that Helianthocereus huascha had a part in the game.

Seeds of Helianthocereus "Vatter 15" were offered in the beginning of the Fifties and were frequently used for hybridizing. The seeding of "Vatter 15" resulted in flowers from white over yellow to red with all kinds of in-between color nuances. This points to the probability that even then we were dealing with Hybrids. Graeser and Krainz share this opinion. "Vatter 15" as well as some other colorfully blooming Trichocerei candicans, as introduced in the Swiss Annual No. III, by word and picture (unfortunately without information as to location), were sent at the time by Vatter to Krainz in Zurich. In reply to my inquiry, Krainz wrote me that nothing is left of these cacti (presumably Hybrids). It is therefore very interesting to report that Fechser in Argentina has again found a red-flowering Trichocereus candicans, which lately also has been offered by "Sued-Pflanzen Importe".

And now for the summary: The Helianthocereus-Hybrids possess pretty near all flower colors, ranging from white-yellow, orange to pink and red-dark-red, partly multicolored and with a black throat. Needed here is a strict selection, the chaff from the wheat. Possible cultivation aims are larger flowers.

The future of the Trichocereus-Hybrids lies in larger, colorful flowers, as, for example, it has long been the case with Phyllocactus-Hybrids. Cultivation aims are manifold and infinite. Much has yet to be done in the field of yellow-colored nuances.

As far as I know, we don't have here as yet black-throated Hybrids. However, a few Helianthocereus-Hybrids present themselves in this regard for in-crossing. Only coincidence can show how far flower size may be improved to surpass 20cm. "Imperialis", a Trichocereus-Hybrid, may be mentioned in this connection. It only blooms when large, but its white flowers allegedly reach a diameter of up to 30cm.

At any rate, the trait of plentiful flower production has to be improved. Many Trichocereus candicans hereditary factors are present in the Trichocereus-Hybrids. This, in most cases, leads to late flowering, and could be improved by large-flowering Helianthocereus Hybrids.

I don't find Echinopsis-Hybrids, their most beautiful flower colors notwithstanding, at all suitable for in-crossing. They would somewhat crowd out the typical round-blunt petals of the Trichocereus Hybrids, and it just is this form of a petal we wish to retain.

It is also hard to predict just how successful we shall be in obtaining filled flowers. At any rate, we have to work on a continued cultivation and selection of all the Hybrids which show an above-average amount of petal rows.

MR. AND MRS. ALAN BLACKBURN Citizen Photo

HONORARY LIFETIME MEMBERS OF THE TUCSON CACTUS & BOTANICAL SOCIETY

The Tucson Cactus & Botanical Society has awarded to two more of its members, Alan and Betty Blackburn, honorary lifetime memberships. They are founding members of this Society which was organized in 1960. Alan was its first vice-president, and was president in 1966. He has served on its Board of Directors often and on various committees. He is a qualified judge for cactus shows, and is a recognized authority on cacti and other succulents. He was a member of the staff of the Arizona-Sonora Desert Museum for many years, having retired only recently. He has instructed many classes at his Open Gate Ranch, in the culture of cacti and the other succulents.

Betty and Alan have been active in all our cactus shows. Betty was chairman of our first show. Being a professional librarian, she was active in setting up the Society's library. She has often served as welcoming hostess to strangers visiting our meetings. She and Alan have a wide acquaintanceship among our members. The Blackburns have always kindly welcomed T.C.B.S. members to their gardens. Many dozens of foreign and out-of-state cactophiles have passed through Blackburn's friendly "Open Gate" into their Desert Garden of Eden where they have been welcomed as interesting fellow hobbyists as well as new friends. The Blackburns' foreign correspondence with interested cactophiles is world-wide. Truly, Alan and Betty can be called "The Blackburn Cactus Team", in every sense of the word. (ed).

JOHN L. MEYER IN HAAG MEMORIAL GARDEN 1964

IN REMEMBRANCE OF OUR 1964 PRESIDENT

John L. Meyer, age 81, was president of the Tucson Cactus & Botanical Society during its fourth year-1964. On February 16, 1978, he died in Tucson. He remains among those presidents of our Society who have achieved admirable results for it. He helped design, construct and plant our Haag Memorial Garden honoring our founder, "Cactus John" Haag, at the Arizona-Sonora Desert Museum. Many successful and happy field trips to Sonoran Desert cacti habitats highlighted his administrative year. John's friendly and fair-minded personality made many friends for him personally and as the fourth president of our Society. John is survived by his widow, Isabelle. She, also, is a respected and greatly admired builder of the Tucson Cactus & Botanical Society. To Isabelle we express our deep sympathy. (ed).

"The Living Sands of Namib Desert of Southwest Africa" will be another National Geographic SPECIAL scheduled for March 6, 1978. This is the home of that mysterious plant--"welwitschia"--which should interest all succulentophiles.

THE MEXICAN MONOTYPES---No. 2

LOPHOPHORA WILLIAMSII

CLIFFORD W. WOODWARD, GLENSHAW, PENNSYLVANIA

Member of Tucson Cactus & Botanical Society

Cliff became very interested at age eleven in cacti when he saw some in his grandmother's home in Pennsylvania. At age fourteen in 1974 he introduced himself to the members of the Tucson Cactus & Botanical Society. He became an active member through corresponding with us and contributing articles to Chatter. He steadily collects and studies his favorite plants that are housed in his greenhouse built by his dad and himself. This year he graduates from high school. We send Cliff our congratulations and best wishes for a bright and successful future.

Of all the fantastic Mexican cacti, the strangest has to be Lophophora williamsii. This cactus has been disputed for several centuries, and is still among the weirdest members of the plant family. In 1790 it was given the name Peyotl zacatensis, but in 1894, Lemaire named it Echinocactus williamsii, which later was changed to Lophophora williamsii.

The generic name is from the Greek meaning crest, referring to the pencil of hairs borne at the areoles. This very curious plant, although referred in turn to Echinocactus, Mammillaria and Ariocarpus, has very little in common with any of these genera. In the origin of the flower it is like Echinocactus, but otherwise it is very different. In its globular habit and the shape and size of the flowers it resembles many of the plants classified as Mammillaria, but it has very different seeds, flowers, areoles and structure. In its fruits, seeds and flowers it approaches Ariocarpus, but in other respects it is very different. Habitat: Mexico and the United States. It grows on both banks of the lower reaches of the Rio Grande on the U.S.-Mexico border, but also elsewhere in Mexico. Its best know locality is the town of Laredo, Texas.

The body is soft, elastic, dull bluish green, globular or broader than it is wide, 2-3-1/4" (5-8 cm) broad, and usually branching in age. The underground extension of the body is a strong, turnip-like root, 4-6" (10-15 cm) long. The 5-15 ribs are shallow, nearly vertical or irregular and indistinct, divided in some forms into tubercles that bear tufts of matted hair forming a thick cover of yellow-white or grey-white wool on the crown. From this cover emerge flowers which arise throughout the whole growing period--pale pink to white to pale violet in color, with a darker central stripe. They are 1" (2.5 cm) broad when fully opened. The tube is broad, funnelform; outer perianth-segments and scales green on the back, callous tipped; filaments much shorter than the perianth-segments, nearly white; style white below, pinkish above, shorter than perianth-segments; stigma lobes 5, linear,

pinkisth; ovary naked; fruit 7/8" (2 cm) long or less, red and fleshy, which is born the second year; seeds 1/16" (1 mm) in diameter, with a broad basal hilum.

The cult of the Peyote was most widespread in Mexico before the white man came. This plant contains a narcotic and has been the subject of much study regarding its chemical, medicinal and therapeutic properties. Dr. L. Lewin isolated an alkaloid which he named anhalonin. Since then, one or more other alkaloids have been discovered, including mescaline. The active drug contained in this plant, however, it is claimed, does not lie in the alkaloids but in certain resinous bodies discovered by Dr. Erwin E. Ewell. The physiological effects which follow eating the dried plants are remarkable visions, an ability to see into the future and to foretell future events. These have been described in considerable detail by writers who have visited the Indians using them. They have recorded laboratory experiences. There is considerable commerce carried on in this plant by some Indian tribes, especially those from the north who journeyed to the southern United States and Mexico to collect these cacti. The globular plants are sliced into 3 or 4 sections and then dried in the sun. These dried pieces form the Mescal Buttons of the trade.

According to Safford (Journal of Hered. Washington 8:f. 5, 6, 7 1916), Bernardo Sahagun in the sixteenth century spoke of its use by the Indians of Mexico. Sahagun, however, supposed the plant was a fungus, and called it "teonanactl" or "Sacred Mushroom". Missionaries forbade consumption of Peyote, calling it the "Devil's Root" as the ceremonies and superstition were linked with the old Aztec religion. The ceremonies at which these narcotics were used (originally religious cult ceremonies) were prohibited by law, and in their stead a special church worshipping these plants was founded in the United States, the faithful receiving them as the Host.

This species is known variously as Pellote, Peyote, Mescal Button, Devil's Root or Sacred Mushroom. Also it is sometimes called Dumpling Cactus, and, according to Mr. Robert Runyon, Challote in Star County, Texas. In Central and Northern Mexico some districts and villages bear this plant's name, such as Lomerias de Peyote, Peyotan, and San Jesus Pyotl, Pyotl being of Aztec origin and even earlier. Lophophora williamsii is one of the hardiest of all the known cacti, growing where even the Pelargania will not survive. They withstand the hottest sun in summer, and even the air of big cities. They require a heavy, nourishing soil and adequate light. In winter they prefer to be left undisturbed in a dry, cool atmosphere with temperature about 50 degrees F. (10 degrees C.). They should be watered and generally treated the same as Ariocarpus. These plants are true examples of the proverbial hardiness of cacti. They are true collector's plants and extremely hard to obtain. Seeds are slow to grow, but patience is a small price to pay for one day owning a Peyote. Some persons may say that the

Peyote is unsightly and not worthy of cultivation, but I think it is beautiful.

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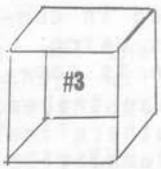
Note: city of publication follows each reference in Parenthesis.



CHATTER BOX

Interesting Points on Plants, People and Publications in The Succulent World

JOHN B. HALES

USS ARIZONA-THE SHIP'S SILVER SERVICE

Is now fully displayed on the mezzanine at the State Capitol in Phoenix, being returned to the state Dec.7, 1976. The tragic day was Dec. 7, 1941 when Pearl Harbor was bombed which sparked World War II, and the USS Arizona became a casualty including the loss of many lives. At last, this lavish display of silver has a permanent home behind glass and may be viewed by the public during Capitol hours. The most 'outstanding' item of this huge silver service set is one of the punch bowl and its 12 goblets, most ornate and heavily engraved, designed with our saguaro Cacti, forming four different clumps of towering arms. This beautiful punch bowl was used recently, for the first time since it was salvaged from the sunken battleship, when our ex-Governor's wife, Mrs. Pat Castro, served during an artists' exhibition. School children contributed this gift through donations to the battleship some 40 years ago--a beautiful display of silver.

ART NOUVEAU - OPUNTIA DESIGN

Art Nouveau (nōō-vō) was a revolution in design from an inkwell to an entire building, away from the 'Historic Styles' which swept Europe around 1900, about the time electricity came into use. Themes from nature were adopted to a great extent-wide in scope. Furniture designs were based solely upon floral motifs and plant forms. The reign of Art Nouveau was brief and dramatic, but is now gaining back popularity. The famous French designer, Louis Majorella, in collaboration with the Daum brothers excelled in plant-like forms and designs. The superb craftsmanship of Majorella's lamp-holder in the shape of a cactus in flower, involves opuntia pads twining with 13

electric light bulbs, in various sizes resembling flowers and buds. It is an 'object of art' and on display in The Musee de l'Ecole de Nancy, Nancy, France. Rossana Bossaglia's lovely book on Art Nouveau - A Revolution in Interior Design-carries a beautiful picture of this cactus lamp. The lowly opuntia was well chosen for this design.

HELP WANTED: Other TCBS Members to participate in CHATTER BOX. Items of interest in the Succulent World, which you feel should be passed on, will be most welcomed. Let's hear from you all.

JOHN B. HALES

IN REMEMBRANCE

--------Col. William M. Young

William M. Young, ("Bill") was born in Omaha, Nebraska and died Nov. 29, 1977 at the age of 79. He received a Ph.D. degree in Electro-Physics at the U. of Illinois. He was first listed in Who's Who in America and several other Who's Who's during the 30's. When World War II broke out, he was Dean of Applied Science at Ohio U. As he was a reserve officer, he was called to active duty. He served in the U.S., Africa, and Italy--in the Signal Corps. He retired in 1958 as a colonel.

He attended his first meeting of the Cactus Club in Oct. 1961 when it was meeting in the home of Cactus Joh, the founder. He had collected cactii for a garden in West Texas in the 1920's --not knowing or caring about scientific names. He simply was fascinated by cacti. After coming to Arizona in 1958, he collected cacti wherever he legally could--from all over the continent. His last "trophy" was an insignificant little prickly pear from the Fraser River, near Cache Creek, British Columbia, Canada.

Bill always said he had so many hobbies that he could not pay proper attention to any of them. His main hobbies were: photography, cacti, rocks, and travelling--mostly with his Airstream travel trailer, everything scientific and visiting with all sorts of people. In fact, his wife, Peg, does not know anything in which he was not interested. Cacti and the other succulents were his very special friends--the scientific names, of course, were important to him but the plants themselves were his special loves. Bill Young leaves his wife, Peg, three daughters, seven grandchildren--and a great assortment of cacti, agaves, and other succulents. --- Peg Young

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Dunbar Smith, our member of several years, passed away on December 11, 1977. He served as a delegate to the C.S.S.A. convention, representing T.C.B.S. He is survived by his wife, Martha, also our member. We extend our sincere sympathy to her.

David B. Zeavin, age 15, son of our member, Edna Zeavin, passed away on December 14, 1977. To Edna and her husband, Barney, we send our message of sympathy.

1978 Officers and Board Members of The Tucson Cactus & Botanical Society

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DECEMBER PROGRAM OF TUCSON CACTUS & BOTANICAL SOCIETY

Varied and Interesting

The traditional Christmas buffet, in charge of our experienced hostess, Goldie Dean, once again drew praise from cactus gourmets. Efficient President Roger Dean and his helpers arranged tables and seating for comfort, both indoors and in the patio at the Tucson Botanical Garden where we met. A well-organized and informative program arranged by Roger Dean followed the meal. The first part included the awarding of honorary lifetime memberships in the Tucson Cactus & Botanical Society to Alan and Betty Blackburn. They remained unaware of being honored thus by the Society, until the moment of the awarding. In addition, those members awarded this honor in past years, were presented their certificates of membership never before received. They are: Alta (Mrs. P.G.Nichols), Paul Shaw, and Josephine Shelby. Mr. and Mrs. P. G. Nichols, close friends of "Cactus John" Haag, founder of the Tucson Cactus Club, were the first members (1967) to be awarded this membership. P.G. passed away several years ago. The second part of the program was the installation of our 1978 president--John C.Gaston. He received the presiding officer's gavel from Roger Dean, outgoing president. Paul Henshaw presided as Master of Ceremonies in his impressive manner.

We collected $49.00 in cash and 24 toys at this Christmas Party, which our 1977 President, Roger Dean, and his wife, Goldie, delivered to the children at the Pre-School Center for Cerebral Palsy. The staff at the Center have sent to us, through the Deans, their heartfelt gratitude for our remembering these children who have brain damage and neurological disorders.

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EDITOR'S NOTES

The two fine cactus shows of spring 1978 in which our exhibitor members excelled have led this issue into detailed reports. These we know will interest our entire membership for several reasons. Our thanks to all members who helped to report details; who contributed photos of the Show; who wrote a Chatter Box item, ad infinitum.

Ed and Peg Busch are expert tour guides and hosts on our T C B S bus trips. They took 40 of us to Phoenix on March 12 to the Cactus Show at the Desert Botanical Garden. This trip was all the more enjoyable because of their hospitality on the bus.

Joe and Ethel Brick's April visit to Tucson was all too short. Their many friends in T C B S welcomed them warmly.

T C B S members intending to take the Chiricahua Mountains Tour (as already announced) should by this date have mailed their reservations to Earl Passwater of Phoenix, Arizona.

Ten English cactophiles were recent callers at Blackburns' Open Gate Ranch. In addition, they were guided to local cactus habitats by T C B S Affiliate Director, Josephine Shelby, who was their Tucson hostess.

Vincent and Jessie Lopresti, our members in Sierra Vista, Arizona, were hosts to this same group. Vince guided five of them into Sonora, Mexico cactus habitats where they were able to collect favorite cacti.

T.C.B.S. PRESIDENT — JOHN CACTUS GASTON — TELLS ABOUT THE 1978 CACTUS SHOW

Visitors to the 1978 Cactus Show of the Tucson Cactus & Botanical Society on March 24, 25th at the El Conquistador Plaza were treated to an unparalleled display of beauty. The floor plan for this year's Show, by member Charles Clement, varied from the traditional circle of display tables. An "open" style of display was used to add a third dimension for viewing plants -- to everyone's enjoyment. Being able to walk among the plants allowed visitors to see plants from all sides. Considering that there were over 300 plants on display, that is a lot of sides. The quality of plants at this year's Show exemplifies the pride and expertise with which Tucson cactophiles grow their plants.

One highlight of the Show was a section on native Arizona cacti which informed the public that there are many of such besides the saguaros, the barrels, and the pincushions. Another feature of great interest was a display under glass of many of the miniature cacti and succulents. One special table displayed the plants, ribbons, and trophies which had been won by our members at the Desert Botanical Garden Show in Phoenix only one week prior. (For the report of this Show, read herein "Thirty-first Annual Cactus Show, Papago Park, Phoenix, John B. Hales).

Members at work at the plant sales tables were kept busy from opening until closing hours--helping buyers select plants; advising them about cactus and succulent culture; and answering their countless questions. Mary Church even showed one customer how to apply Aloe Vera to his sun-burned head! At the close of our Show, Dick Wiedhopf sold all remaining unsold plants to a Phoenix cactophile -- a lucky sale by a good salesman. Net income from this Show will be about $1400.00.

This 1978 Show was a great success. It is a tribute to the efforts made by all those members who worked on it. Special thanks go to Charles Clement and Agnes Daniels who designed and coordinated the display; to Pat Wiedhopf for publicity; to Dan Birt who handled all those "last minute details." Also, thanks to George Brookbank, U. of A. Extension horticulturist who gave a special program about cacti on his "Good Morning, Tucson" television show, and advised his viewers about our approaching Cactus Show. This year's Show has passed. It will not be forgotten. Now is the time to take a look at what we accomplished in 1978 to see how best we can improve our Show in 1979. KUTGW!

A VISITOR'S REACTION TO THE CACTUS SHOW A friend of Betty Blackburn wrote: "It was good to see and visit with you last Sunday at the Cactus Show. I did not know that so many different kinds of cacti exist. The sizes, the shapes, the twists, the untwists, colorful blossoms, etc. were something to see and think about."

T C B S MEMBERS AND NUMBER OF PLANTS THEY DISPLAYED AT 1978 CACTUS SHOW

Alan Blackburn 60. Myrtle Ethington 40. Dan Birt 30. Agnes Daniels 25. Nancy Clarke 20. Barbara Rogers 20. Bill Pluemer 17. Dick Wiedhopf 17. Mary Church 10. Earl Christensen 8. Archie Deutschman 6. Helen Housman 12. Anne Christensen 5. John Gaston 4. Charles Clement 3. Martha Raney, Lynda Ryan, Tom DeHaven, Norma Beckman 2 each. Ken Hartsock 1. Devon Shropshire 1. Kay Stehulka 1. Evelyn Turenne 1.

T C B S MEMBERS AND NAMES OF THEIR PLANTS EXHIBITED AT 1978 CACTUS SHOW

Charles Clement Haworthia Subfasciata Kalenchoe Flossfeldiana Aloe Mitriformis

Dan Birt Lemaireocereus thurberi Hamatocactus Hamatacanthus Agave Parviflora Echinomastus johnsonii Aloe variegata Euphorbia Resinifera Kalenchoe Thyrsiflora Cleistocactus Hilocanthus Astrophytum Ornatum Echinocereus Fendleri (Mt. type) Notocactus Uebelmananniaus Echinocereus Fendleri (valley type) Ferocactus acanthodes, covillei, wislizenii Mam. Oliviae, Thornberi, Fasciculata Stetsonia.

Agnes Daniels Opuntia linguiformis Euphorbia cereformis Notocactus Submammulous Cereus Peruvianus monstrose Euphorbia Flanaganii Kalenchoe Tomentosa Ferocactus Ingens Haku-jo sport Rebutia Species Aloe Zanaibarica Crassula multicava Obregonia Denegrii Sanseveria Cylindrica Aeonium Urbicum Monvillea Spegazzinii Pilocereus Palmerii Aloystera albiflora Mam. Geminispina, Bocasana, Duoformia, Multihamata, Compresa, Meigeana, elongata crest Schiediana

Anne Christensen Mam Pottsii, Bocasana Echinopsis multiplex crest Notocactus Leningnausii Gracilis Elegans Devon Shropshire Mam. Geminispina (short spine)

Evelyn Turenne Gymno Friekerickii

Mary Church displayed an assortment of her favorite plants among which were Aeonium, Euphorbia, Crassula and others.

Myrtle Ethington 3 pots of assorted lithops and other mesembs. Pachyphytum Overiferum, Coeruleum Graptopetalum Macdougalii Pachyveria "Elaine" Gasteria Liliputana: Brevifolia, Gracilis Crests: Serpentina Cristata Vistiti Cristata Mamillata Cristate Monvillea Cristate Mam.: Nivosa, Plumosa, Herrera, Goldii, Longiflora Aporocactus Flagelliformis Gymno Beguinii Echinocereus Davisii Haworthia: Reinwardtii diminuta, Schuldtiana, Viscosa, Maughanii, Truncata Senecio Tropaeolifolius Sedum Amacamecanum Dudleya Britonii Aloe humilis variegata Kalenchoe: Farinacea , Uniflora, Nyikae Echeveria: Pulvinata rubra, Rosea Grande, Hybrid Derenbergii, Multicaulis Red Edge

Alan Blackburn Ferocactus marcrodiscus. Notocactus schumannianus. Mam.: swartzii, scheidiana, wedermannii,nivosa (cluster), candida, elongata, comptotricha, ulzowiana, elongata var. tenuis, algibensis, glochidiatus Gymnocalycium denudatum Gymnocalycium fleisherlinium Turbinicarpus lophophoides Coryphantha recurvata Mam. Lasiacantha Coryphantha elephantidens Neobesseya missourensis echinocereus ledingii Epithalantha micromeris Picture

Alan Blackburn cont'd. Planter Aloe aristata Oreocereus trollii Haworthia faciata Haworthia claripeila Haworthia vicosa pseudotortuosus Andromiscus maculatus Andromiscus bremekampii Mam. spinnosissima, elongata hyb. pink nymph, surculosa Mamillopsis senilis Leuchtenbergia principia Ornithogalum caudatum Mam. spec. (name not known). Haku-Joe hyb. echinopsis Parodia Pennicilliata Espostoa churinensis Lophocereus schottii Lophocereus schottii var. mieckleyanus Notocactus hase-bergii Mam. bucareliensis.

Helen Housman Kalenchoe Argyallis Euphorbia, crown of thorns Mam. Elongata Crassula Artenta variegated

Earl Christensen Ferocactus Coloratus Pachypodium Saundersii Opuntia Subulata Echinomastus Intertexta Gymno Mihanovichii Senecio Kleinia Sulcorebutia Steinbachii Euphorbia Pfersdorfii

Dick & Pat Wiedhopf Kunzlana Vatteri Bruchii Malacocarpus Sellowii Cephalacereus purpusii Ariocarpus Kotschubanus Bruchii X Denudatum Buiningia Breuicylindrica 3 Mam. Camptotricha Mihanovichii Valniceckianus Gymno Elongata Melocactus Nacrodiscus Euphorbia Groenwaldii Neobuxbaumia Crocidata Dealetii

Nancy Clarke Cereus Peruvianus monstrous Fouquieria columnaris Idria 2 Notocactus magnificus 3 Espostoa Lanatas Oreocereus celsianus Lophocereus Schottii Beaucarnia Recurvata Astrophytum Myriostigma 2 Echinocactus grunsonii Brusera Microphylla Echinopsis Crest Euphorbia Horrida

Barbara Rogers Euphorbia Flanaganii, Crest Montrous, Neriifolia, Misera Opuntia Subulata Cotyldeon orbiculata monstrous Kedostris africanus Begoniaceae incina, venosa Anacampseros Albissima Trichodiadema Senecio Hawarthii Kalenchoe Velvetina, Tomentosa super fuzzy, Ginger, Kalenchoe Golden Girl, Chocolate Soldier Pachypodium Saundersonii, Lamerei

Ken Hartsock Gasteria 18"

Archie Deutschman Mam. Pullihamata Klissingiana Crucigeria Xalmania Miegeana Taylorium

John Gaston Sclerocactus whipplei Echinocereus triglochidiatus Epithelantha greggii crest Lophocereus schottii

Bill Pluemer Mam. tetrancistra, arestera, microcarpa (straight spine), Cochisea (Robbins), Heyderi macdougalii, Echinocereus dasyacanthus, Boyce Thompsonii Echinocactus polycephalus Coryphanta Bisbeeana Pediocactus Bradyi, Paradinei, Utahia Sileri Ferocactus Xeranthemoides, Eastwoodii

Martha Rafney Euphorbia Flanaganii Crest Crassula - Jade Plant

---

A suggested addendum to a part of the publicity in the Star and the Citizen about Tucson Cactus and Botanical Society Winners at the Phoenix Desert Botanical Garden Show, March 19, 26, 1978.

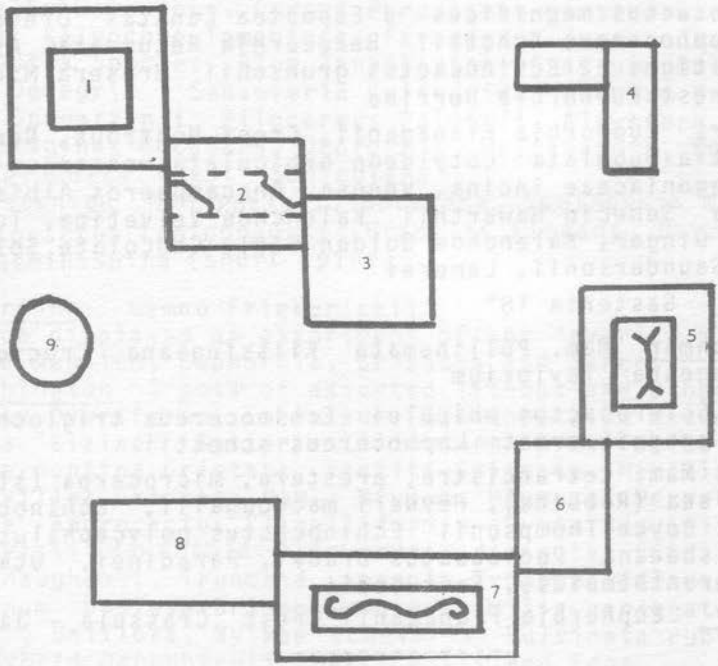
7 WIN IN CACTUS SHOW

"Seven Tucsonans, members of the Tucson Cactus and Botanical Society, were winners at the Phoenix Desert Botanical Garden Show, etc.". These 7 winners entered this Show as representatives of the Tucson Cactus and Botanical Society. KUTGW.

CHARLES CLEMENT OF TUCSON CACTUS & BOTANICAL SOCIETY

Charles Clement, 27-year resident of Tucson, has created pen and ink illustrations for CACTUS CAPITAL CHATTER. A graduate of New York City Art Schools and of the University of Arizona, he has travelled throughout the United States, Europe and Mexico. He and his late wife, Louise, built their home in the desert foothills near Tucson. Here they became interested in cacti and other succulents "in a modest way" -- more for their forms and colors, and because they remain green yearlong. Charles has a broad experience as a designer and craftsman, with works such as book illustrations, house and garden designs, wallpapers and fabrics. Also such works as the Presidio Park Fountain; mosaic murals in Tucson; and at the State Capitol in Lincoln, Nebraska. His latest work includes copper repoussee for the Arizona Bank at El Conquistador Plaza; in the Pima County Courthouse; and in St. Francis de Sales Church. Charles created the layout and display in the 1978 Cactus Show of T.C.B.S. He is listed in "Who's Who in the West."

FLOOR PLAN OF CACTUS SHOW — by CHARLES CLEMENT



1. Raised area, 2. 2 shadow boxes on raised area, 3. Raised area 10" from floor. Native cacti, 4. Glass over top. Miniature plants, 5. 2 shadow boxes on raised area, 6. Raised area 10" from floor, 7. Raised area, 8. Raised area 18" high, 9. 4 ft. diameter.

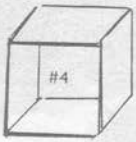
DISPLAYS AT TCBS CACTUS SHOW 1978

Photos by Ross Daniels

SEEDS – 1978 SHOW – ED BUSCH, CHAIRMAN

At the seeds table at our previous shows, we have had considerable educational and demonstration materials both of which received much attention and appeared to be appreciated by our visitors. Largely because of a late start in preparing for our recent show, our demonstration materials this year were minimal. Even so, we were swamped by requests for information on desert plants. Cactus seed sales as well as information requests thereon ran a poor second to that of other native plants. To have served the public adequately would have required two knowledgeable persons at all times to just answer questions. This interest in "unthirsty" plants probably stems from the recent increased cost of water as well as publicity on the advantages of landscaping with desert species. We, in 1979, should be prepared for an even greater interest in desert plants. In so far as seeds are concerned, the time to start is NOW. Poppy seeds are already collectable. We will be able to use the seeds of most desert plants that have a pleasing foliage and shape or that have a nice blossom. Examples are: fairy duster, red blossom bird of paradise - both the shrub form and the tree form, red blossom desert willow, Mexican elderberry, sweet acacia, Parry penstemon, desert marigold, brittle bush and a dozen others. Each lot of seed should be identified by species name, month and year of collection and name of person who collected. Your collection of cactus seeds have been adequate in both amount as well as variety of species.

QUESTION -- Has an active and interested 1978 Seeds Committee already started to collect seeds of Arizona native plants other than cacti -- as recommended above by Seeds Chairman, Ed Busch? Is it guaranteed that this group will continue to collect such seeds steadily throughout the year? We can serve the Tucson community in a fine and practical manner by carrying out the recommendations of Ed Busch. -- (ed).



CHATTER BOX

Interesting Points on Plants, People and Publications in The Succulent World

JOHN B. HALES

"PLAYFUL SATIN-WRAPPED WOODEN CACTI"

ARCHITECTURAL DIGEST, April 1978 issue, visits SANDRA RHODES, famous British fashion designer: hers a (5) floor house in a London Square of faded Victorian grandeur.....and what makes it GRAND? The satin wrapped wooden cacti designs seem to permeate most of the beautiful pictures in this amazing theatrical home, whose main purpose is having somewhere to entertain friends. Saguaros and barrels - in front of windows - against walls - next to divans-entwine among the decor, making it worth a 'squint' into this beautiful magazine. Her motto: "To be a success all you need is 15% talent and the rest can be achieved with hard work." Sandra has no horticulture problems with these above-mentioned species.

CHATTERBOX cont'd.

"CRISSWELL PREDICTS" THE OLD WEST -- "I predict that medically we will return to the days of the Old West. Many pioneer and Indian cures came from the blooming cactus, and work today just as they did in our golden age of yesterday--a creamy salve for snake bites, afterbirth irritations, saddle burns, broken skin and pre-operation cleanser. This creamy cactus salve will again be the salvation a century later." Our thanks to Central Phoenix SUN publication dated April 19, 1978 for permission to pass this information on to TC&BS members.

FOR YOUR BOOKSHELF

THE ILLUSTRATED ENCYCLOPEDIA OF SUCCULENTS by GORDON DOUGLAS ROWLEY of Reading University, England. Here's the most beautifully illustrated, most comprehensive succulent encyclopedia done to date! The first to provide full-color photographs of almost every known species of cacti and cactuslike plants. Over 250 full-color illustrations - 9" x 12"/200 pages. (CROWN'S CATALOGUE 53309-X. $14.95. American consultant, CHARLES GLASS, is editor of Cactus & Succulent Journal of America. Mr. Rowley also advises another release soon which is titled "NAME THAT SUCCULENT" - Keys For The Identification of the Genera in Cultivation. Both books would seem a 'must' for the serious Succulentophile collector of plants. Gordon's visit to Tucson accompanied by Mr. Len Newton in 1968 is well remembered, as Alan Blackburn & Paul Shaw both generously gave lots of time showing off our desert flora. See The National Cactus & Succulent Journal (English) - ROWLEY Reporting ..June, 1970 issue as to their Arizona visit.

"CACTUS" cream pitcher by the Indiana Tumbler & Goblet Co., during its comparatively short life (June, 1894 to June, 1903) produced a great quantity of pressed glass. Their specialty was Chocolate Glass & the famous "Golden Agate" known to most collectors as 'Holly Amber' with a beautiful leaf design. The company's novelty wares were covered animal dishes, many pitchers, and the famous "Dolphin" covered dish. Upon viewing the illustration of the "Cactus" cream pitcher, it is hard to visualize any cactus design, but very evident is an Agave with beaded edges, and alongside a tall Crassula pryamidalis, both nicely designed. Very understandably, Glass Designers, during that period were 'lumpers'. Please contact Betty Blackburn, who sent in this tidbit of interest, if anyone is so lucky as to have any of the above mentioned antique pressed glass.

THIRTY–FIRST ANNUAL CACTUS SHOW PAPAGO PARK–PHOENIX

JOHN B. HALES

THE DESERT BOTANICAL GARDEN and Co-sponsor, THE PHOENIX GAZETTE presented The 31st Annual Cactus Show of Cacti & Other Succulents and Allied Materials March 12 thru 19, 1978, in the Garden's Webster Auditorium, Papago Park, Phoenix, Az. Again, alluring to camera fans were the wildflowers, flowering trees and shrubs. The Aloes gave a splash of color, and more so this year due to the excessive moisture from recent rains. A Joshua Tree (Yucca brevifolia) was blooming for the occasion, and a Hopbush (Dodonea microzyga) from Australia in red fruit. The path-lined trails were well groomed by the Garden Staff for this "Grand Event", being considered the best show ever for many reasons. Some 200 species of cacti alone with about 800 exhibited plants gave a large range to "THE WORLD OF SUCCULENTS" for our friends and winter visitors.

A 'talking' Saguaro Cactus greeted many visitors to the entrance of the Auditorium which had been transformed into a fine showing of succulent plants. She is known by the Garden Staff as "Sadie", probably in honor of the recent rains. One arm of the Saguaro of papier-mache was inhabited by an Elf Owl. A very clever idea for Moppets are most popular this season.
Each Garden Show will be remembered by some outstanding event--1978 will be The Tucson Cactus & Botanical Society's huge participation and interest, entering some 100 lovely specimen plants by their members. A chartered Greyhound Bus brought many from Tucson for the opening on Sunday. It is a real pleasure to have their concern for a good show and bringing their plants from such a distance.

MEMBERS EXHIBITING: Marie Bellafiore, Alan Blackburn, Dan Birt, Mary Church, Earl Christensen, Nancy Clarke, Myrtle Ethington, Judi Gaston, Ken Hartsock, Dick Weidhopf.

JUDGES: Gary & Shannon Lyons from Huntington Botanical Gardens, San Marino, Ca., and W. H. Earle, Director Emeritus, Phoenix for the Cacti & Succulent Divisions.
AWARDS: Blue- Red-White-Green (Honorable Mention) Ribbons and various trophies, best ever in design and most attractive.
Due to the immensity of entries and awards, limited space will allow only a few "BEST AWARDS" which carry a Blue Ribbon and Trophy to be mentioned. All TC&BS Ribbon Winners will be recorded in Cactus Capital Chatter. Other "Outstanding Plants" and "Unusals" will be described briefly.

SWEEPSTAKES AWARDS (Most Blue Ribbons in Section)
CACTI-Fran Tolleson. OTHER SUCCULENTS -Kathy McCombs. ARRANGEMENTS - Joan Gossman. PHOENIX GAZETTE AWARD (Most Blue Ribbons in Show)-Fran Tolleson.

TROPHY AWARDS BEST CACTUS in Show ..Judi Gaston..OROYA GIBBOSA BEST SUCCULENT .. Kathy McCombs .. CONOPHYTUM MUNDUM, BEST CACTUS COLLECTION .. Joan Skirvir .. MAMMILLARIA SPP., BEST SUCCULENT COLLECTION .. Kathy Corbett .. LITHOPS SPP.,

BEST MAMMILLARIA...Alan Blackburn.....MAM. BOMBYCINA BEST CRESTED CACTUS ..... Dan Birt .. MONVILLEA SPEGAZZINII SPECIAL SHOW AWARD ..... Dick Wiedhopf .. GYMNOCALYCIUMS

This award was in 'COLLECTIONS' with (8) entries totalling 43 cacti,won a White Ribbon, together with a trophy on GYM. vatteri v. longispina.

It definitely was THE YEAR OF THE MAMMILARIA. 90 entries allowed this genus (3) sections (12-13 & 14). All together 129 MAMS., excluding those in Dish Gardens and Planters, competed for prizes. A beautiful display -many in bud and flowers.

Ceroids from South America , AREOCEREUS & ESPOSTOA (Div. 24-25) were an eye catching display of (22) entries, tennis-ball size to almost 2 ft. tall; their spination intermixed with long-white silky hairs.

INNOVATIONS for the 1978 show. WINNERS' CIRCLE TABLE consisted of (21) entries, having won a Blue Ribbon in the 1977 show. Again exhibitors have an opportunity to display their prize winners. Outstanding were: a Beaucarnea recurvata with curling green-like ribbons cascading; a branched Cotyledon panicula 2-1/2 ft. tall; Senecio pendulus resembling a bowl of green snakes.

Missing from this year's show were ARTS which hung above the display tables, and PHOTOGRAPHY displayed in the Herbarium. Due to the popularity of these two subjects, they now both carry their own shows - The "SPIRIT OF THE DESERT" Art Show and "DESERTS OF THE WORLD" Photography Show. Both were successful and well attended.

- THE PATIO -

The Patio Area was as exciting as ever with dozens of lovely 'Leaf Succulents' decorating the long-display tables - Spring flowers blooming along the patio walls - two adorable hanging baskets of HOYAS: H. bandaensis with white-star shape flowers and H. purpureo-fusca, with deep pink flowers taking a Blue Ribbon. A Planter basket of PELARGONIUM TETRAGONUM blooming profusely, greeted all visitors to this semi-outdoor atmosphere. AEONIUMS filled the corner nicely, the Star being an A. gigantea carnariense. The AGAVE section seems to be always crowded - two huge A. attenuata and (5) various size of A. victoriae reginea were displayed. Nancy Clark's HAWORTHIA FASCIATA VARIEGATA var. ALBA with two rosettes and pups prettier than ever. EUPHORBIA (div T1) with thirty-one entries holds great interest for John Q. Public - after fantasizing, their remarks: "I didn't know there were so many cactus." An E. horrida, a clump of 12 branches - a gem. A Blue Ribbon and Trophy winner was E. bougheyi for Fran Tolleson.

Other Sections of DESERT TREES and SHRUBS, DESERT BONSAI and CAUDICIFORMSincluding ARRANGEMENTS, ALLIED INTERESTS AND EDUCATION displays were well patronized with entries. Dish Gardens and Arrangements, perhaps a bit smaller than some of our shows were a hit.

Marie Bellafiore's dish garden of cacti most interesting.

OUTSTANDING & UNUSUAL - a few very weird. Graptopetalum Sp. cresate - most interesting - by Mary Church. Ariocarpus furfuraceus 6 in. tall and attractive. Two huge Mammillaria gigantea - small dinner-plate size. Kedostris africana - Best Award in Caudiciforms. Senecio articulatus varigata-colorful. Notocactus leninghausii with its beautiful satiny-yellow spines. Also, N. haselbergii with (8) blossoms. Xerosicyos danguyi with thick-green oval leaves. Coryphantha elephantidens-7 in. tall entered by Ken Hartsock.

Another fine show passes into the annals of The Desert Botanical Garden, with sincere thanks and appreciation to the ninety-six exhibitors, and to all who worked on the show for the enjoyment of the many who came to see "SUCCULENTA GRANDE".

RIBBON AWARDS WON BY TCBS MEMBERS AT DESERT BOTANICAL GARDEN SHOW
PHOENIX MARCH 12-19, 1978

ALAN BLACKBURN Blue Ribbon - Mam. Lenta, Mam. bombycina Red Ribbon Crested Espostoa ritterii & Normanbokea valdeziana (Graft) Green Ribbon Mam. perbella Mam. elata - crestate - own roots.

DAN BIRT Blue Ribbon Monvillea spegazzinii Astrophytum capricorn White Ribbon Beaucarnia recarvata Green Ribbon Aloe cristata

EARL CHRISTENSEN Red Ribbon Pachypodium saundersiae White Ribbon Senecio kleinia Green Ribbon Echinomastus intertextus Gym. mihanovichi

NANCY CLARKE Blue Ribbon Lophocereus schotti v. monstrosa Azureocereus hertilingianus Pachycormus discolor Red Ribbon Echinopsis kratorherliana Gym. sagliones varigata Aloe haworthioides Idria columnaris Bursera microphylla White Ribbon Neoporteria gerocephala Hamatacactus hamatacanthus Green Ribbon Mam. prolifera Melocactus matazanus Hoodie species Haw. fasciata variegated Kalanchoe tomentosa.

MYRTLE ETHINGTON Blue Ribbon Echinocereus davisii Red Ribbon Mam. plumosa Senecio tropaeolifolium White Ribbon Mam. herrerae Haw. reinwardii v. diminata Green Ribbon Mam. nivosa

JUDI GASTON Blue Ribbon Aroya gibbosa Neoporteria nidus

DICK WIEDHOPF Blue Ribbon Cephalocereus purpusii Red Ribbon Melocactus macrodiscus also - Buininga brevichy lindrica White Ribbon Euphorbia groenwaldii Collections --gymnos.

to be continued

CACTUS CAPITAL CHATTER

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY
Affiliate of Cactus and Succulent Society of America, Inc.

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"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."

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EDITORIAL

OF DROUGHT AND DESTINY

Joe Brick, Fresno, California. Member of Tucson Cactus & Botanical Society

It has been said before and it will doubtless be said again: Periodically we come up against something which puts a huge dent in the primary assumption that we are the masters of the Earth. We aren't. We shouldn't think that we are.

Another reminder that we aren't comes in the news from the State Forestry Division of California that the two years of drought have killed 18 million trees in the forests of California. This calls seriously into question the grand assumption about humankind controlling its own destiny. The drought's effect on trees is a reality that we can understand, but at the same time, it presents us with a mystery we can only observe.

Why does one majestic tree, weakened by the lack of water, fall prey to disease and pests while another survives in fine fettle? Is nature secretly using the drought to clean out what is weak? Is it a process of relinquishing which must occur? Will the old life be replaced by a newer, more robust life? These are questions older than the hills the trees stand on. Nature is not teaching us a lesson. She has no lessons to teach, no moralities to expound. Nature is not in the business of teaching. What we are observing is the basic truth of the randomness of life. Although we are of the earth and of the universe, we cannot fathom the whys of Nature.

I SAY, OLD CHAP, MEXICO?

VINCENT F. LOPRESTI, SIERRA VISTA, ARIZONA

Member of Tucson Cactus and Botanical Society

On the evening of April 28, 1978, Joy Lewis, Jean and Cliff Johnson, and Ron and Blanche Dale of England gathered in our living room in Sierra Vista, Arizona, after having spent a wonderful day in Tucson with Josephine Shelby, our newsletter editor. A three day sortie was quickly planned. Then off to bed so we could get an early start.

Saturday morning broke crystal clear and warm as my five English friends. I loaded our gear into my pick-up. Our objective was to leave Sierra Vista by six a.m. so that we would clear customs in Nogales by eight a.m. The week-end mob hit customs at the same time we did, so it was nine fifteen a.m. when we cleared the last customs barrier 15 miles south of Nogales, Sonora, Mexico.

Two of my guests sat up front, and three "flaked-out" on the bunks in back. This was to be our routine for the next three days. While we were becoming acquainted, we quickly reached Santa Ana, Sonora, where we turned west toward Caborca. About twenty minutes out of Santa Ana, we made our first stop to take pictures of a Saguaro which stood some twenty feet tall and had a six foot crest spreading across its top. On to Caborca, where we turned South toward Libertad. At our second and furthermost objective 40 miles South of Caborca, we ate a delightful picnic lunch among the Pachycereus Pringlei, Carnegiea Gigantea, Lemaireocereus Thurberi, Ferocactus Acanthodes and and assortment of hooked-spined Mammillarias which would have driven Craig mad trying to identify them with their apparent minor differences. They all seemed to be related to Microcarpa until you examined them closely. Then it became very confusing because of obvious differences which would require close analysis before identification would be certain. Next we moved north about ten miles where there are two mountains literally covered with Ferocactus Acanthodes. If you are fortunate enough to see these mountains at sunset, it seems as though someone spilled red balls of fire over the mountains. This particular plant has bright red spines as compared with its cousins with white spines, near Libertad, and bright golden spines on the Pt. Lobos road.

Again heading North, it was necessary to stop for pictures of many plants in bloom, including wild flowers and various opuntias. About twenty miles East of Caborca we stopped in Ferocactus Covillei, Echinocereus Pectinatus var. Pectinatus, Mammillaria Mainae etc., country. All too soon, the sun was setting making it necessary for us to make a dash for the border so that we would not be inadvertently hitting burros, horses or Mexicans in the dark. A perfect day ended with a stop at a Sonic hamburger stand where our friends enjoyed the experience but were quite confused by placing their order over the call box.

The next morning we headed East to Naco, a typical little Mexican village. The bribes required to clear customs jumped from two dollars at Nogales, to five dollars at Naco. The car permit man took two dollars and visas were priced at 50 cents each for the six of us.

Heading west out of Cananea a few miles to our first stop, we crossed a gully on the south side of the road and proceeded up the mountain afoot. The six of us spreading out about 20 feet apart for maximum effective coverage, it was not long when Blanche let out a yelp and there was the biggest Mammillaria Wrightii I have ever seen, six inches in diameter. I had found one three years ago in this general area but had been unable to locate any quantity until this trip. This discovery made the whole three days worth while. Proceeding westward toward Imuris, our second stop was the most exciting for my guests. We crawled under a barbed wire fence, then headed in a westerly direction on foot as suggested by me, knowing the spot well. I knew Joy Lewis who was slightly in the lead was due for a surprise. She got very excited when she came upon a very large Coryphantha Recurvata. I suggested that she look fifteen feet further ahead where there was a clump about three feet in diameter. We were surrounded by Recurvata and Echinocereus Pectinatus var.Rigidissimus which to them was a rare plant. To say the least, they "had a ball" taking pictures and selecting a few perfect specimens. Echinocereus FENDLERI and assortments of Mams filled out the day which was cut short by a six o'clock appointment they had to keep in Bisbee, Arizona.

The third day was spent picture-taking in Arizona. This included Peniocereus Greggii var. Transmontanus, Coryphantha Arizonica, Coryphantha Bisbeeana, Mammillaria Gummifera var. MacDougalli, Mammillarias Grahamii vars. Grahamii and Oliviae, Echinomastus Intertexta and Erectocentra, Coryphantha Scheeri var. Robustispina, Echinocereus Englmannii, Echinocereus Fasciculatus vars. Fasciculatus and Bonkerae. The route taken that day was Sierra Vista, Tombstone, Benson, I-10 west to Marsh Station Road, South on 83 down the Old Sonoita Highway, Sonoita, Patagonia, Nogales, Continental, back west to Sonoita Highway and home after a good steak dinner at the Steak-out Restaurant in Sonoita.

Judging by the thanks expressed, these three days were the highlight of their trip, in spite of Joy Lewis almost driving off a cliff on the Continental road and my fast driving in Mexico trying to get back into the United States before dark.

VICK AND ELIZA MERRILL'S GIFT TO THE TUCSON CACTUS AND BOTANICAL SOCIETY

Vick and Eliza Merrill, members of our cactus club since its early years, have steadily contributed, to its activities and programs. In April 1978, they gave the following gift of fine books to our library:

The Cacti of Arizona.....Lyman Benson
(2nd Edition, Dec. 1950
3rd Edition)
Cacti for the Amateur.....Scott Haselton
Succulents for the Amateur.....J.R.Brown, Alain White, Boyl Sloane, G. Reynolds (edited by Scott Haselton)
Book of Cacti for the Amateur Collector....H.C. Lawson
Succulents and Cactus.....Sunset Book
Cacti.....Walter Kupper and Pia Roshardt
(edited by Vera Higgins)
The Flowering Cactus.....Raymond Carlson
Flowers of the Southwest Mesas.....Pauline Patraw
100 Desert Wildflowers in Natural Color....Natt N. Dodge
Pocket Encyclopaedia of Cacti in Colour....Edgar & Brian Lamb
The Book of Cacti and Other Succulents.....Claude Chidamian
Flowers of the Southwest Deserts.....Natt Dodge
Cacti and Succulents.....Haage
Cactus & Succulents and How to Grow Them...Scott Haselton
The Observer's Book of Cacti and Other Succulents.....S. H. Scott
1970 and 1971 Monthly Notes with binder....Lamb
(also includes binder for Photographic Reference Plates)

Our entire membership expresses to Vick and Elizabeth Merrill our genuine gratitude. Many friends and individual members will want to write to the Merrills personally. This is their address: Mr. and Mrs. J. Vick Merrill, 3220 Lake Johanna Blvd. St. Paul, Minnesota 55112.

CACTUS & SUCCULENT SOCIETY OF AMERICA, INC. NEWS

RISING PRICES! New affiliate fees for 1979 are rising. The individual subscription to "AFFILIATE REPORTER", a CSSA administrative newsletter, will go up in 1979. There is no indication yet, that the subscription to the CACTUS & SUCCULENT JOURNAL will go up.

THE LIBRARY OF T C B S NEW ADDITIONS IN 1978

1. Cacti and Succulents for the Amateur Charles Glass and Robert Foster..... $3.50
2. The First Fifty Haworthias and The Second Fifty Haworthias J.W.Pilbeam..... 2.25
3. 3 volumes on Lobivias Dr. Rauh..... 39.00
4. Native Trees and Shrubs for Landscape Use in Desert Southwest.....Dr. C. Sacamano..... 1.00
5. Photographic Reference Plates Binders for Lambs' Reference Plates 4.00
6. Haworthia Handbook ..... Boyer 9.50
7. Growing the Mesembs ..... Jorn 3.95
8. Aloes for Greenhouse & Indoor Cultivation..W.C.Noble... 2.00

TOTAL $81.20

Librarians: Nancy Clarke and Myrtle Ethington
Library address: 2800 E. Ft. Lowell in office of Nancy Clarke Insurance Agency.

1978 DESERT BOTANICAL GARDEN SHOW ENJOYED BY MANY TCBS MEMBERS

The following members went by bus to this Show on March 12, 1978, under the care of our experienced travel host and hostess, Ed and Peg Busch: D.Birt. Blackburns. A. Christensen. B. Centner. M. Church. Earl Christensens. Doughertys. L. Frank. A. Grodson. H. Housman. Howes. F. Hartwig. K. Hewitt. B. LaRoche. Loprestis. H. Nase. B. Pickett. Raneys. K. Stehulka. A. Sproge. L. Schacht. J. Shelby. H. Klopfer. D. Alexander. Deans. Gastons.

FREE PLANTS RECEIVED BY 1977 T C B S MEMBERS

January: Notocactus apricus. February: Gymnocalycium baldianura. May: Rebutia mixed species. June: Mammillaria microhelia. July: Echinocereus Reichenbachii. August: Lemaireocereus Marginatus. October: Mammillaria bocasana. November: Myrtillocactus geometrigans.

PIMA COMMUNITY COLLEGE OFFERS COURSES BY DEAN AND YOCUM

Roger Dean, 1977 president of the Tucson Cactus & Botanical Society, has joined the faculty of Pima Community College. During the fall of 1978 he will teach a course--The Study of Arizona Cacti. It is designed for cactus lovers who will learn about cacti. This course includes the study of Arizona cacti; identification of cacti; the Law concerning the use and abuse of cacti. Additionally, slides will be shown of rare, blooming cacti; guest speakers will present further details; field trips will be taken to cacti habitats. Roger Dean has a B.S. degree from the University of Kentucky, and has studied at Iowa State College and Purdue University, Indiana.

Harrison Yocum, a member of the faculty of Pima Community College, during 1978 will conduct a Landscape Gardening class covering all aspects of Landscape Design and Plants. Each student will develop a landscape design for his own use. Layout and Arrangement of plants are investigated, including Trees, Shrubs, Formal--Informal--Modern style gardens, Special Type gardens (rose, rock, cactus).

Mineral Identification & Rock Prospecting is the second class he will instruct during 1978. This is a course for General Interest, and all sessions are field trips to Canyon de Chelly, Globe copper mines, calcite mine at Bishop's Cap, N.M. and many other sites of rich, geological interests. In 1979 he will teach Desert Landscaping involving the identification, care and pertinent information on desert trees, shrubs, wild flowers, cacti and succulents. Slides, guest speakers and field trips enrich this course.

Harrison Yocum has a B.S. degree from Pennsylvania State University, and a M.S. degree from Rutgers University. He is founder and honorary life member of Tucson Botanical Gardens, and honorary life member of the El Paso Cactus & Rock Club. He has been a member of the Tucson Cactus & Botanical Society for many years.

DESERT REFLECTIONS **Betty Blackburn**

Have you ever observed the budding of a yucca carnosa? When the bud first appears, it reminds me of a large scoop of peppermint stick ice cream. At full bloom it is shaped like a large electric light bulb. Actually the bloom is a mass of white lily-like blossoms.

One morning as we wtached the birds scratching for seed, a mamma quail came in with 8 wee, just hatched babies. They ate for a second or two then. It was a chilly morning. The mother moved to a sunny spot close to a tree well, spread her wings and all 8 babies disappeared under them for five minutes. It was fun to watch.

Alan snapped a picture of the small lobivia plant covered with 16 scarlet blossoms.

Weren't the wildflowers beautiful this year? Each day when I walked to the mail box, I discovered a different one to identify. I don't recall ever having seen so many senecios. The rufous-sided towhee added a bit of cheer this winter when he came in for seed. Alan keeps a pot of chives in the lath house to prevent red spiders on his plants. In September he begins an extra watering of South African plants. Never a dull moment at the Blackburns.

SOME USES FOR CACTI

CHOLLAS SAVE FIRM A BUNDLE Dick McCalley, a process control engineer, had his first painful encounter with cholla cacti while hunting in the fragile Arizona Desert. He capitalized on this incident. He is now using the tough but non-abrasive cactus needles to save expensive circuit boards which formerly were spoiled by too much solder at Honeywell Information Systems in Phoenix.--Tucson Daily Citizen, 5/25/77.

THE CHANCE OF A LIFETIME

All this would become possible because the Arizona desert was dotted with millions of ocotillo cactus*plants, the Fouquiera splendens, hitherto considered commercially worthless. Possibilities of the ocotillo plant as a source of chewing gum chicle, first was discovered around 1912 by one J. D. Crawford, described in an 'Arizona' magazine. Chemist Crawford turned his attention to the ocotillo after discovering the value of the desert plant, guayule, as a source of raw rubber gum. In the process Phoenix very likely would become the world capital for the new raw material necessary to make chewing gum. For only $10.00 a poor working man could acquire one share of stock offered by The Arizona Chicle Gum Co. organized under the laws of the new state. The sales pitch was early 1916 and resources should be confined to Arizonans, they explained. "If we are going to make millionaires, let's make them out of our own people and not give away our birthright." On the surface, at least, plans of the new company did make some sense.

At the time, chicle was refined from the sap of a tree named the sapodilla. The method of drawing sapodilla sap was much like that of extracting sweet fluid from North American maple trees. Few buyers of Arizona Chicle Stock knew that the tree, an evergreen with big leaves that reached a height of 50 ft. bore little resemblance to the grubby Arizona ocotillo.

Anyone who didn't believe it could go to company headquarters and see in miniature, just how chicle gum could be produced from a branch of the ocotillo. The demonstration process began with running a strip of bark thru an ordinary kitchen meat grinder. That pulverized mess went into a screen-bottomed copper cylinder into which was poured a quantity of extracting solvent. Topping the cylinder of ground-up ocotillo was a smaller cylindrical container of water. The whole was perched atop a gas plate heating unit. End result was that the solvent condensed in the water and dripped down through the pulp, and into another container. That mess was then heated until the solvent escaped, leaving a fine variety of raw gum, as pure and uncontaminated as a baby's breath.

Whether the Arizona Chicle Gum Co. ever got beyond the drawing board, history fails to relate. It's for sure that Phoenix never became noted as a chicle production center. As for the lowly ocotillo, nowadays it's sort of an endangered variety of desert plant life and in Arizona it is against the law to dig it up or cut it down.

*Even tody Fouquiera splendens is often referred to as a "cactus" by many.

■--Condensed by John B. Hales from an article in The Phoenix Republic by Lowell Parker.

PLASTICS OR CLAY?

by Dr. D. H. Nelson

Reprinted from the Bulletin of the Alpine Garden Society, with the kind permission of the Editor of that excellent Journal.

A somewhat hackneyed subject perhaps but we make no apology for reprinting this article, which throws new light on the subject.

THE OBJECT OF A POT is to contain a plant or plants for:—

1. Portability, to facilitate
   a. Temperature control
   b. Light control
   c. Protection against the elements
   d. Protection against pests
   e. Display
2. Control of soil conditions.

Almost every material has been used and the most improbable containers have succeeded. I once saw a fine display of house plants, including African violets, grown in jam jars; fortunately no one had told the lady owner that roots needed drainage and darkness, which did not matter as no one had told the plants either. This is the crux of the matter; the whole subject of the culture of plants in containers is befogged by mystique and shibboleths which pass on from book to book and old japonica to pseudo-modern gardener. A plant in a container is growing under artificial conditions, and attempts accurately to mimic its native circumstances are fraught with difficulty; the only rules that apply are those that are found by experiment to work.

For many years the red clay pot has been the universal container, for one reason only—that it was cheap. In many ways it is a poor container with multiple disadvantages—but it was cheap; the operative word being *was*. Because of price, gardeners adapted themselves to overcome their many disadvantages and deceived themselves into believing in its inherent assets, such as roots breathing and thick clay being warm. I can produce arguments favouring red flannel over mink, but my wife remains unconvinced.

Now that the main advantage of the clay (its cost) is no longer applicable, there seems no possible reason for its use. Many commercial growers have appreciated the economics of this and the increasing use of old tin cans speaks for itself; many grow on the pot-less system and large numbers have been converted to paper or fibre pots. The plastic pot still has not won universal acclaim, principally due to old fashioned and ill-found prejudice, but partly to our inability to adjust to new methods.

Porosity

The simplest way to assess the advantages of the plastic pot is to evaluate the disadvantages of the clay. Principal among these is its porosity, which by the uncritical, is regarded as an advantage. In an alpine house or frame it is usual to plunge a clay to its rim in sand, peat, ordinary soil or in my own case, vermiculite. This seals it from the outside air and reduces its porosity; so why not be logical and start with an impervious material?

"The porosity allows roots to breathe." Rubbish! Examine the roots of *Fritillaria pluriflora* in its solid clay, *Trollius* in its semi-stagnant water or *Tropaeolum polyphyllum* six feet down, to appreciate what nonsense this is! There needs to be water circulation or no food will move past the imprisoned roots and the plant will starve, but porosity hinders rather than helps this process.

The clay allows some of the food-charged water to filter through the walls and saturate them with nourishment; roots searching for this nourishment grow round the inner surface of the pot instead of being evenly distributed throughout the pot as with plastic. I regard this as inelegant, but I doubt if it has any effect on the plant's well-being.

When new, these clays retain noxious chemicals and part of the cult is the ritual of soaking them for 24 hours when received and again for a few hours before use. Using a new plastic pot it is desirable but not essential to blow the dust off.

The porous walls of the clay pot must constitute one of the largest reservoirs of bacteria and viruses in the plant kingdom. After use, the pot should be thoroughly scrubbed in very hot water and then soaked in disinfectant; even after such treatment it must be regarded as a potential source of infection. Plastic cannot retain infection and a single wash is all that is necessary.

The final disadvantages of the porosity is the *pons asinorum* of "tapping". The story goes that the experienced gardener can tell when a plant needs watering by the altered note emitted as the pot is tapped. But, surely, it is only when the porous clay is thoroughly dry, that it is resonant? And to be dry, it must have sucked the last vestige of moisture from its contents and its denizen must be under great stress. If this criterion for watering is used, a plant must be sent to the edge of starvation every time. With the plastic pot the appearance of the plant, the feel of the soil and the weight of the pot must be assessed; but these always have been the criteria of the experienced plantsmen with any container. Because most plants in clays are allowed to get too dry the tradition has grown that small amounts of water are useless and that thorough regular soakings are necessary: this is often the only way to save a drought-dying plant. In plastics there is very little water loss and water needs to be used less often and in small quantities.

The difficulty experienced by most newcomers to plastics is that of watering. Because there is no greedy clay competing with the roots, the soil needs to be more open. I find 50% of chippings to soil about right for most easy plants—never less. This is why artificial composts such as Levington are not always ideal. The design of plastics leaves much to be desired and a very poor feature is the drainage holes. Because old gardeners could not learn to change their soil mixtures, large spaces have had to be made; if the soil is too heavy the size of the hole makes no difference: how-

ever, if soil is light it may dry out too quickly and if the pot is plunged in soil worms can enter from below. It would need a large washer of perforated zinc to fill this space. I find that thirsty plants such as *Helichrysum virgineum* and *Verbascum dumulosum* do better if sheet polythene is put inside the pot to block the drainage holes. (Collapse of Elderly Gardener in the Corner!) At the beginning of this article I mentioned plants in jam jars; we have much to learn once we can clear our minds of the claptrap of the experts.

The thinness of plastic pots can be utilised with some plants which are intolerant of wet on their leaves. Nowadays disposable syringes and needles are widely used in the N.H.S. and old ones can often be obtained with which water can be given by injection through the side of the pot; the needle can be left permanently in position. This technique has been found useful with *Primula allionii*, *Saxifraga florulenta* and *Raoulia mammilaris*.

The final disadvantage of the porosity of the clay is applicable only in highly alkaline areas. If a plant such as *Rhododendron impeditum* is grown outside in a pot buried in the soil, it shows gross chlorosis within one season by leaching of lime through the pot wall. In plastics, lime haters can easily be grown provided the drainage is blocked or some peat is placed beneath the pot.

Temperature Stability

Both types have disadvantages. The plastic is thin and roots can readily become over-heated, particularly if the pot is left standing in the sun. The clay, because of its porosity, can have a refrigerating action and roots can become abnormally cold relative to leaf temperature if in a wind. To maintain correct temperatures pots should always be plunged, whether outdoors or in an alpine house, and once this is done the plastic has the advantage by its absence of chemical transference.

Weight

The clay pot is a heavy object and in the larger sizes ten empty pots can be a considerable load. The plastics when empty are easily carried in hundreds. A twelve-inch pot, when full, is a great weight of which half may be the pot. If plants need moving frequently the advantage of plastics is self evident. One disadvantage of plastic containers can arise from this lightness; a large shrub such as *Convolvulus cneorum* in a plastic pot in Levington compost can be so top heavy as to be unstable on a bench. As, however, these light composts do not readily combine with plastics this problem seldom arises.

A by-product of lightness is stacking ability; plastics can be fitted in "twenty-fives" or even "fifties" for vertical storage; clays are inclined to jam because of weight and slight asymmetry.

Breakage

This falls under three headings; accidental, frost damage, and deliberate.

Accidental

Little need be said as each person has his own experiences of this type of wastage. Plastics bounce!

Frost Damage

I may have been unfortunate in my supplier, but every winter about 20% of small pots and 50% of large pans plunged outside get damaged beyond repair. This was the principal reason for forcing me to experiment and finally converting to other containers. I suspect that the prime cause was shoddy production, but mine cannot be an isolated experience as the manufacturer is reasonably well-known. Plastics do not suffer.

Deliberate

When potting, the ability easily to break a container can be of value. A plant in a plastic is always easily turned out; if it sticks, a little water soon frees it. This is a major advantage of plastics as the delivery of a plant from a clay is often as traumatic as a mammalian delivery. Sometimes, however, the roots may have come through the drainage holes and it is policy to break the pot; the smashing of a clay, or even its "nibbling", can be damaging to a difficult plant. The plastic is readily cut with a lino knife, leaving the base with the roots.

This amounts to a brief summary of some of the principal advantages of the plastic pot. Its minor disadvantages seem to me to be almost trivial once a technique has been established which must differ in many respects from that utilised with clays.

It seems likely that with the rising of a new generation of gardeners the clay pot will become a thing of the past and a museum relic. In my own limited experience I think that the pro's are with the plastic and the con's with the clays.

--REPRINTED FROM THE NATIONAL CACTUS & SUCCULENT JOURNAL OF GREAT BRITAIN, JUNE 1969, VOL. 24-2 P., WITH THE KIND PERMISSION OF ITS EDITOR.

SOME USES FOR CACTI

Tucson police reported that they arrested a man after he tried to hold up a bookstore with a piece of cactus. The man held a foot-long segment of prickly pear up to the clerk and demanded money. The clerk reached under his desk for a club and hit the attempted robber on the head.--Arizona Daily Star, 1977.

PRICKLY PEARS ARE RIPE NOW: TIME TO MAKE PRICKLY PEAR WINE

AGNES DANIELS

Equipment necessary to make 5 gallone of wine.:

1-7 or 8 gallon crock or jar
1 siphon
1 water lock
48-50 bottles
50 corks (top quality)
1 thermometer
1 hydrometer
1 glass stirring rod
2 5 qallons water bottles
1 bottle metabisulphate

Ingredients

3 gals. of prickly pear juice
3-3/4 tsp. cream of tartar
1 pkg. wine yeast
2 gallons of water 70-75 degrees
clarifier-optional
4 campden tablets
4 tsp. nutrient
1/4 c. lemon juice
11-12-1/2 lbs. cane sugar

Procedure

Sterilize jar with a solution of metabisulphate. Cut off tops of cleaned cactus fruit. Cut in quarters and put through food press and nylon bag. Add juice to water in jar, then 4 campden tablets dissolved in warm water, the lemon juice, cream of tartar, and nutrient. Stir in 11 lbs. of sugar until completely dissolved. Take a reading with the hydrometer as per instructions. If reading is below 24, add 1/2 lb. sugar; stir well; take another reading. Do this until the reading is 24. If you have added too much sugar, add water, a little at a time, and take readings until you reach 24. Now add the yeast which has been prepared according to instructions. Cover jar with a sheet of plastic, and secure with rubber band. Stir each day with stirring rod, and replace plastic, for 6 days. Then siphon into sterilized 5 gallon water bottle. Fill to within 3 inches of cork and water lock. After water lock is in place, seal with wax. Use a Metabisulphate solution in place of water in the water lock. After 3 months, wine can be siphoned (racked) into another bottle, being careful not to disturb the lees at the bottom of the bottle. Again seal with water lock and set for 3 months and rack again. Wine is ready to bottle when the small cap inside the lock is not suspended. Add clarifier 3 to 5 days before bottling. Siphon wine into sterilized bottles. Corks should be boiled twice in clean water, 5 minutes each time. Use wine bottles that hold corks. As soon as wine is bottled, cork immediately; then insert an awl alongside the cork to let the gas escape. Leave bottles in upright position for 4 days and check each bottle with the awl again in case there is any gas left. Bottles can now be placed in a horizontal position until future use. Wine is drinkable in 6 to 12 months, depending upon your will power.

DESERT MOSAICIST USES CHOLLA AND SAGUARO TESSERAE

Ted Garcia of San Manuel, Arizona makes mosaic pictures by fitting together hundreds of tiny pieces of cholla and saguaro wood tesserae. He has worked five months on a picture in which he used 2700 tesserae. The frames and outer inlay of his pictures are of untreated saguaro, while the mosaic of the figures is of cholla.

-----San Manuel Miner, San Manuel, Arizona.

CONSERVATION OF NATIVE PLANTS IN ACTION AT DUVAL MINE SIERRITA AND AT IBM TUCSON,..LIFE AMONG DUVAL'S SIERRITA MINE TAILINGS

DUVAL MINE AT SIERRITA, ARIZONA IS RESTORING DIKES

Deer and javelina drink from a water tub. Quail nearby along the side of the quiet hill fly among the palos verdes and mesquites. About 50,000 plants, including palos verdes, mesquites, ocotillos and various shrubs have been replanted on the 155 acres of mine dykes to make them more attractive and to cut dust and erosion. Plants are watered and fertilized through a drip irrigation system of above-ground pipes.--Ed

THE INTERNATIONAL BUSINESS MACHINE CORPORATION SALVAGES NATIVE PLANT LIFE AT ITS TUCSON SITE

IBM has long had a stated policy of making sure that its operations do not adversely affect the natural environment. IBM Tucson has designed its new facilities to have minimal impact on the native desert environment. This includes a landscape Scheme that avoids introducing non-compatibleplant life--emphasizing, rather, the natural scheme. It also includes IBM's practice of salvaging all significant plant life on the construction site, and later "reusing" them as part of the site's permanent landscaping. --R.D.Mallett, Manager, Communications and Community Relations, General Products Division---IBM Tucson.

The membership of Tucson Cactus & Botanical Society thus has the opportunity to convey to Duval Mine and to IBM Tucson its appreciation for their policies of saving native desert plant life and preserving desert fauna. We embrace the policy of conservation of our natural resources. --J.K.Shelby, editor, CACTUS CAPITAL CHATTER.

"If a man loses reverence for any part of life, he will lose reverence for all life."

ALBERT SCHWEITZER

CACTUS CAPITAL CHATTER

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY
Affiliate of Cactus and Succulent Society of America, Inc.

Subscriptions $2.50 Membership $4.00 (includes Cactus Capital Chatter)

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"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."

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LET US PLEDGE OURSELVES TO THIS FINE CREED OF RESPONSIBLE HUMANS
LET US ASSUME OUR SHARE OF MAN'S STEWARDSHIP OF OUR NATURAL RESOURCES
NATIONAL WILDLIFE FEDERATION CREED

I pledge myself, as a responsible human, to assume my share of man's stewardship of our natural resources.

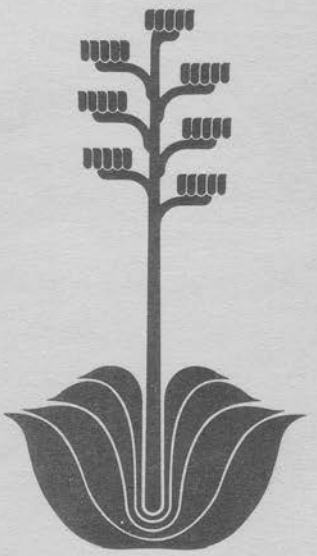
I will use my share with gratitude, without greed or waste.

I will respect the rights of others and abide by the law.

I will support the sound management of the resources we use, the restoration of the resources we have depleted, and the safe-keeping of significant resources for posterity.

I will never forget that life and beauty, wealth and progress, depend on how wisely man uses these gifts.....the soil, the water, the air, the minerals, the plant life, and the wild-life. --- (ed.)

YOU ARE INVITED TO PARTICIPATE IN THE



SECOND ANNUAL PHOTOGRAPHY EXHIBITION

presented by the

DESERT BOTANICAL GARDEN

in Papago Park,
Phoenix, Arizona

EXHIBITION DATES

CLOSING DATE. . . . . Jan. 10, 1979
Judging Date . . . . . Jan. 13, 1979
Exhibition Dates. . . . . Jan. 26 - Feb. 4, 1979
Projection of slides. . . . . Jan. 25, 1979 - 7 p.m.
Jan. 28, Jan 31 & Feb. 3
2:15 p.m. & 3:45 p.m.

Prints & Slides Returned by Feb. 24, 1979

SELECTION OF ENTRIES

You are cordially invited to attend the judging (selection of entries) for the exhibition, to be held in Webster Auditorium at the Desert Botanical Garden. For further information, contact the Chairman of the Exhibition.

DESERT
BOTANICAL
GARDEN
PO BOX 5415
PHOENIX, AZ. 85010
(602) 947-2800

Fall 1978

Photographers of the Desert - -

The Second Annual Photography Exhibition at the Desert Botanical Garden will be January 26 - February 4, 1979.

Both new and repeat entrants are cordially invited to participate.

The theme - "Deserts of the World" -was well-demonstrated in the First Exhibition January - February 1978, the first time entrants other than from Arizona and entries exemplifying deserts other than from Arizona were invited.

LANDSCAPES may contain animal life including humans and the works of man) if they are of MINOR interest.

PLANTS are to be "plant portraits" of desert plants. Last year only plants growing in the wild were acceptable. This year entries may be both field and non-field specimens; however, the hand of man is to be of ONLY MINOR interest.

Student photographers in college, high school or below are invited and encouraged to participate. A second-place award in black and white print went to a high-school student in 1978.

Prints shall be no smaller than 5x7 exclusive of mounts, and no larger than 16 x 20 including mounts. All prints are to be on mounts (cardboard, etc). No framed prints will be accepted. Slides may be 2x2 or 2 1/4 x 2 1/4.

There will be entry fees of $2.50 for each four prints (black and white or color) and $2 for each four slides entered in the show. The show will be conducted according to salon regulations, juried, with ribbon and trophy awards.

DEADLINE for Entries: Entries must be received in the mail at the Desert Botanical Garden by Wednesday, January 10, 1979. They will be returned, together with catalog, by mail before Saturday, February 24, 1979. Mailing address of the Desert Botanical Garden is P.O. Box 5415, Phoenix, Arizona 85010.

A special trophy will be awarded this year for picture taken in the

Desert Botanical Garden which best exemplies the Garden - Landscape or Plant Portrait eligible.

A Preview Showing of the Exhibit will be held at 7 p.m., Thursday, January 25, 1979 in the Webster Auditorium of the Desert Botanical Garden for Garden Members and Exhibitors only, with prints on display and a showing of the slides entered in the show. Location of the Garden is in Papago Park, south of McDowell Road and 64th Street, Phoenix.

The Exhibition opens for the public on Friday, January 26 and runs through February 4 from 9 a.m. to 5 p.m., the Garden's regular hours for shows. Slide shows will be given at 2:15 p.m. and 3:45 p.m. on Sunday, January 28, Wednesday, January 31 and Saturday, February 3, 1979.

We're looking forward to your participation,

Dorothy O'Rourke

Dorothy O'Rourke, Chairman
Second Annual Photography Exhibition
Desert Botanical Garden

Rodney D. Engard

Rodney Engard, Director
Desert Botanical Garden

THE 1978 – 1979 SEASON OF THE DESERT BOTANICAL GARDEN

The Desert Botanical Garden will sponsor four outstanding events during the 1978-1979 season: The Second Annual Botanical Art Show from Oct 6 - 15, an exhibit of botanical prints and originals from the 17th through the 20th century, from the Garden's collection and on loan from recognized botanical artists of today; the Second Annual Photography Exhibit from Jan 26 - Feb 4; the Thirty-Second Annual Cactus Show from Feb 24 — Mar 4 and the Annual Sale of Unusual Plants for Desert Gardens, Apr 7 - 8.

Ribbon and Trophy Awards for photography and cactus shows.

A Catalogue of the Flora of Arizona

J. HARRY LEHR

Curator of the Herbarium, Desert Botanical Garden

In 1960, an *Arizona Flora* with a supplement was published; in 1964 a second printing of it appeared. Thus, eighteen years have elapsed since the last presentation of the entire flora of the state. In that interval extensive floristic work and exploration have been accomplished; many revisions have appeared for groups containing a species in the state. These additions and corrections have now become so numerous that the last edition of the state flora is inadequate to meet the present needs of the botanical community in Arizona.

This catalogue with its annotations is now presented to satisfy the need for a current checklist of Arizona's flora. The sequence of families substantially agrees with that in *Arizona Flora;* in those instances where genera inclusion within particular families has been changed, this change is in agreement with Willis's Dictionary.

In presenting this catalogue an effort has been made to record the common names under which the plants are known by the layman. In every instance the common name presented here was not manufactured by the writer, but it occurs either in the cited literature or other standard reference sources listed in the introduction.

An index to families and genera is appended to this study. It is not only cross-indexed but an asterisk precedes those genera which include a new addition to the flora of the state.

The author plans to publish a yearly supplement of additions and corrections in the *Journal of the Arizona–Nevada Academy of Science*: This will be continued until such time as a revised edition of the *Arizona Flora* or a book about southwestern flora is presented to the botanists of this state and its continguous states.

A CATALOGUE OF THE FLORA OF ARIZONA, iv + 203 pp., 5½ x 8½, 1978. Soil-resistant cover. $4.75 postpaid in U.S.A.

The extensive bibliography of 230 references guides the reader to the current literature in which systematic and taxonomic changes have been made.

THE AUTHOR

J. Harry Lehr has been Curator of the Desert Botanical Garden since 1969. He is the author of *Flora of Rockland County* (New York).

DESERT BOTANICAL GARDEN
P. O. BOX 5415, PHOENIX, ARIZONA 85010

MAMMILLARIA BENECKEI

William A. Pluemer

Quite a few years ago I collected what was then described as "Mammillaria Barkeri" near the Rio Elota, Sinaloa, about an hour's drive north of Mazatlan. Here I found it in large clumps in the soft alluvial soils of well-shaded areas. Although Ehrenberg first published this plant as M. Beneckei in 1844, the intervening years have provided the nomenclators with fertile ground,- not unusual in this cactus hobby of ours. Britton & Rose published this plant as M. Nelsonii, Boedecker added M. Balsasensis, Craig decided upon M. Balsasoides and Bravo originated M. Guiengolensis. In the CACTUS & SUCCULENT JOURNAL, Vol.XLIII, Nr.5, Glass & Foster, in their "Mexican Logbook" brought this nomenclatorial evolution to a happy ending by undeniably proving the synonomy of the above names.

In the field, M. Beneckei appears a rather non-descript, clustering mam, usually weather-beaten and with little real eye-appeal. One might observe: "Just another one of those small look-alike mams". However, in cultivation M. Beneckei rises to the occasion and transforms itself into exciting clusters of small, shiny, dark green globose gems. The blooms, although very sparse, are its crowning glory. Other than to note they will measure more than 50mm in diameter, the attached photo will speak for itself.

In cultivation M. Beneckei possesses the ability to literally transform its growth pattern by bringing forth numbers of "pups", much in the nature of echinopsis. Weakly attached to the parent, and with strong centrals, even a casual brush by an errant sleeve will dislodge these offshoots. As small as some are, I have picked them up from the concrete slabs of my greenhouse floor after several weeks to find strong root systems developed and ready for potting. This tenacious instinct for survival probably accounts for the widespread distribution of the plant. Although Britton & Rose show an illustration of the seed of their M.

Nelsonii, I have had no success in pollinating this plant, nor have I knowledge of anyone having such success. There have been no reports of seed being collected in the field. Thus, it would appear that M. Beneckei survives and thrives by vegetative regeneration.

IN REMEMBRANCE

Mrs. Maud A. Ash, a member of Tucson Cactus & Botanical Society, died on October 16, 1978. Her two surviving sisters, Mrs.Florence E. Hartwig and Leafy G. Frank, of Tucson, also belong to our cactus club. To them, we extend our heartfelt sympathy.

WELCOME TO GEORGE ELLIOTT OF ENGLAND WHO HAS JOINED THE TUCSON CACTUS AND BOTANICAL SOCIETY

20 Buckfast Drive Formby, Lance, England

Dear Sir:(Affiliate Representative of the Tucson Cactus and Botanical Society)....
I am writing to enquire if it would be possible to become an associate member of your local Cactus & Botanical Society. The reasons I wish to join or become associated with a U.S. society is primarily that you are in the heart of the cactus world. The information on collecting trips taken by members, local events, and how and what you keep in your collections would be of great interest to me.

Just the idea of a local journal or newsheet would give me reading and re-reading material for quite some time. I have a small collection of cacti acquired over a period of four years. My collection is kept in a small greenhouse in my garden. I have about 300 plants, mainly small, young ones. The main part of the collection consists of Mammillarias and Gymnocalycium, although I have about 20 other genus of cacti. I also have a small selection of Lithops, Euphorbias, Bromeliads and Echeverias.

Trying to keep cacti in the North of England is quite a challenge as the weather is so unpredictable, and the air is generally dirty due to the North being an industrial area. I live in Formby which is about 12 miles from Liverpool and 8 miles from Southport. There are quite a few well run clubs in theaarea, but membership is usually only about 20-60 per club. I belong to the Southport Cactus Club, meeting once a month with guest speakers and occasional visits to local cactus nurseries.

I found the addresses of all the CSSA affiliated societies on the back of your U.S. Cactus Journal. I chose the Tucson Society as Arizona and Tucson are so closely associated with

cacti. I would quite understand if what I am asking is not possible, but if it could be arranged, I would be prepared to pay and with extra postage or expenses incurred.

Yours sincerely,

George Elliott

SOME NATIVE CACTI OF NEW MEXICO AND OF MEXICO

Guest Editor–Dale B. Morrical of Las Cruces, New Mexico

The Mammillaria Wrightii-Wilcoxii-Viridiflora Complex
Dale B. Morrical, El Paso Cactus and Rock Club.

These small jewels of the Cactus World are among the most prized and sought after of all of our native plants. Weniger in his book, Cacti of the Southwest", remarks that "fortunate is the Cactophile who ever gets to see one". Along with other authors, he makes a point of the rarity of this complex which hardly agrees with the facts. Explorations by members of the El Paso Cactus and Rock Club continue to disclose new locations and based on their efforts alone, the distribution of the various species comprising this group can be determined. In addition, club members have added three new species to the complex.

Distribution of this family is limited to a narrow corridor starting north of Las Vegas, New Mexico in the Sangre de Cristo Mountains, extending west to eastern Arizona and south to Chihuahua City in Mexico. The western extent of the range is Superior, Arizona and from there, south to Cananea below the Mexico Border. Within this vast area, distribution is sparse, normally in the form of widely scattered, densely populated colonies. Along the western extremity, Wilcoxii is the predominant plant and along the eastern and central portion, Wrightii, found as far south as the Organ Mountains and as far east as the Sacramento Range in the vicinity of Carrizozo.

In Mexico the picture changes and new related species are found; Garessii discovered by Green and Garess south of San Buenaventura, is a most unusual plant. On an exploration trip to Santa Clara Canyon with Eleanor Brown and Mary Moore, Edith Morrical found the first known specimen of Santa Clarenis the rarest plant in the complex. In 1967, Dale Morrical located Mammillaria in the Canyon of Majalca, some twenty-five miles north of Chihuahua City. Quite a record for a group of collectors!

All of the plants of this complex are small, compact and very beautiful. Wrightii is distinguished by its reddish brown spines and large brilliant violet flowers. Like all the other plants of this family, it has hooked centrals, one in most species through Wilcoxii has three. Wilcoxii is generally smaller than Wrightii and the flowers pink. Viridaflora has greenish flowers and is similar in appearance to Wilcoxii with about the same range.

South of the Border, things change. Garessii is much larger than any of the state-side species, up to four or five inches in diameter, and often clusters forming large groups. Flowers are small and pink or white in color. Santa Clarensis is small about the size of a quarter with small white flowers. Spinaticn is distinct, with numerous white radial and brown hooked central spines. Habitat is peculiar, found generally growing on the bright green moss that covers the dark walls and rocks in portions of the canyon where the sun never penetrates. Morricalii is different from all the other species having bright golden-green spines and reaches a large size, often two to three inches in diameter and four inches high. Flowers are usually white with a tint of pink or orange, often with a midstripe of darker color. It is also a dweller of the dark narrow canyons and is most often found at the base of cliffs in the company of Echeveria Strictaflora, and various ferns and mosses.

To conclude, putting the various species together we have Mammillaria Wrightii, Wilcoxii, Viridiflora, Garessii, Santa Clarensis and Morricalii. And like Weniger; we will have to agree that fortunate are we who have seen all of these.

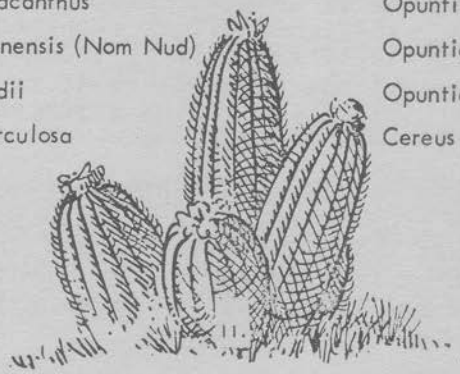
The editor of CACTUS CAPITAL CHATTER is indebted to Dale B. Morrical for this generous contribution. He is recognized as a very knowledgeable and experienced cactus enthusiast of southwestern U.S.A.

Doña Ana County is located entirely within the Chihuahuan Desert and is quite probably the richest cactiferous area in the United States. Located at about the center of New Mexico from east to west and 32 degrees north of the Equator its terrain is extremely varied. Lake Lucero and the white gypsum sands of White Sands National Monument form a part of the eastern boundary; volcanic badlands line the western boundary. In between are high mountain ranges of granite, sedentary limestone outcroppings often with extensive fossil beds, low rolling limestone hills, sand dunes and flowing placidly through the center, the Rio Grande River of story and song. To the south it extends to the El Paso area in the eastern portion and to the Mexican border west of the Rio Grande. It extends north to the Sierra Caballo and the northeast corner reaches to a line about even with Truth or Consequences. Mountain ranges run north to south starting with the Potrillo Mountains along the west edge, the Selden Mountains along the Rio Grande, the Doña Range and the Organ Mountains and San Andres Range at the eastern edge. Elevations range from 3500 feet along the Rio Grande near El Paso to over 9000 feet in the Organ Peaks. Temperatures range from averages of 90 or so in the summer to daytime winter temperatures in the fifties or sixties. Unofficial extremes are minus 14 degrees and about 110. Humidity averages about 20% and the rainfall about 8 inches a year, coming mostly in the summer months.

Las Cruces is the largest city, with Old Mesilla near by. The old Spanish Camino Real went through Mesilla, Las Cruces, Picacho and on through the Jornada del Muerte (Journey of Death) to Santa Fe. Before the Spaniards, waves of Indian migrations passed this way on their interminable journey to the south. After the tribes had settled down trading was brisk up and down the Rio Grande as artifacts, bits of shell and copper found in the many Indian diggings in the county testify. The folsom man wandered through about 15,000 years ago and since that time the Rio Grande Valley has been rather densely populated.

Ancistrocactus Uncinatus
Coryphantha Macromeris
Coryphantha Muehlenpfordtii
Coryphantha Vivipara
Echinocactus Horizonthalonius
Echinocereus Chloranthus
Echinocereus Coccineus
Echinocereus Fendleri
Echinocereus Fendleri, var Robustus
Echinocereus Gonacanthus
Echinocereus Rosei
Echinocereus Neomexicanus
Echinocereus Pectinatus var Neomexicanus
Echinocereus Stramineus
Echinocereus Triglochidiatus
Echinomastus Dasyacanthus
Echinomastus Intertextus
Epithalantha Micromeris
Escobaria Dasyacanthus
Escobaria Organensis (Nom Nud)
Escobaria Sneedii
Escobaria Tuberculosa

Ferocactus Wislizeni
Mammillaria Hemispherica
Mammillaria Lasiacantha
Mammillaria Meiacantha
Mammillaria Microcarpa
Mammillaria Wrightii
Opuntia Arenaria
Opuntia Clavata
Opuntia Chlorotica
Opuntia Englemanii
Opuntia Grahami
Opuntia Imbricata
Opuntia Kleiniae
Opuntia Leptocaulis
Opuntia Macrocentra
Opuntia Phaeacantha
Opuntia Polyacantha
Opuntia Santa Rita
Opuntia Spinosior
Opuntia Trichophora
Opuntia Woontonii
Cereus Greggii



The largest population on record of a rare and threatened cactus species has been discovered at the construction site of the new Tramway Boulevard in northeast Albuquerque, New Mexico. A population of about 85 specimens of the Blue Grama Cactus, otherwise known as pediocactus papyracanthus, was discovered in May 1977 by David Sabo and Warren Wagner of the University of New Mexico Department of Biology. The cactus is on the Smithsonian Institution's proposed listing of endangered and threatened species. A price tag cannot be placed on the local specimens which will help insure the preservation of the species. "The plant, which is native to New Mexico and northeastern Arizona, is very, very rare," Sabo said. "It's on the verge of extinction.... evolutionarily, it's on its way out," Wagner added. Records show that specimens of the Blue Grama Cactus, so-called because the spines of the plant closely resemble clusters of Blue Grama Grass, have been located 21 times previously. These specimens were transplanted to a location north of the Sandia Mountains for their protection. As an extra precaution, the men said that they would not reveal the exact location where the cacti were transplanted.

LARGEST RARE PEDIOCACTUS PAPYRACANTHUS POPULATION DISCOVERED IN NEW MEXICO

BOOK REVIEW THE ILLUSTRATED ENCYCLOPEDIA of SUCCULENTS, Gordon Rowley. 1978. Crown Publishers, N.Y., N.Y. $14.95 at the Garden Bookstore or $17.00 postpaid in the continental U.S.

This is a book that is bound to become a best seller. As most of us know, the increasing interest in succulent plants has resulted in a plethora of pseudo-experts, a proliferation of colorful coffee table books, and an abundance of handbooks. However, it was the greatest pleasure to find a copy of this new book on succulents in my mail one morning. Anything Gordon Rowley writes is worthy of your attention for the clarity of his literary style alone. In this book every page except the bibliography, glossary and index is alive with excellent color photographs. The text is as impressive as the illustrations. There are short introductory chapters on such subjects as morphology, pollination, evolution, cultivation, conservation and nomenclature. These are followed by discussions of the plant families that contain most of the world's succulent flora. Errors are few and far between. AGAVE SCHAWII is reported to rarely offset and to propagate itself entirely by seeding. My information would indicate that just the opposite is true. However, Gordon may have found a population such as he describes for Agaves are extremely variable in this respect.

I cannot overestimate the value of this book to collectors. It is an exceptionally fine introduction to the biology of the plants that they avidly seek. The large format and the extensive use of color photographs make this one of the great bargains of the year. --Saguaroland Bulletin, October 1978. --R G E.

WARNING THIS SUBSCRIPTION IS DUE TO EXPIRE IN EXACTLY 16 PAGES

With only the pages of this issue between you and the expiration of your subscription to CACTUS CAPITAL CHATTER, TIME IS RUNNING OUT!! Be SURE you have more enjoyment coming each quarter. RENEW NOW BY 1. Paying at once your 1979 TCBS membership dues--$4.00. You receive CHATTER when your current dues are paid and O N L Y if paid. No paid-up dues--No CACTUS CAPITAL CHATTER. 2. Subscribing to CHATTER if you are not a member--$2.50 per year. Make all checks payable to TUCSON CACTUS & BOTANICAL SOCIETY, whose address is: P.O. Box 3723, College Station, Tucson, Arizona, U.S.A. 85722.

1978 ANNUAL REPORT OF EDITOR OF CACTUS CAPITAL CHATTER

Four quarterly issues of the CACTUS CAPITAL CHATTER were published. Interested cactus and succulent enthusiasts continue to mail us their applications for annual subscriptions. Generously they send us their compliments from Ghana, Africa, Belgium, East Germany, West Germany, Scotland, Czechoslovakia, New Zealand, Australia and Canada. Also among our subscribers and newsletter-exchangers are: U.S. Cactus and Succulent Societies.31 individuals. Tucson libraries, the University of Arizona Library, the Herbarium and the Boyce Thompson Southwestern Arboretum.

I have mailed to Ian Lawrie, editor of Scotland Cactus and Botanical Society's Newsletter, the entire set of CACTUS CAPITAL CHATTER in which all of Bill Pluemer's very popular articles and color photos have appeared. Mr. Lawrie wrote to us: "Our members to whom I have shown your CACTUS CAPITAL CHATTER have very much enjoyed his writings. I would like very much to print all of his habitat travels, as such first-hand accounts are always of great interest to our members."

We consider this a real tribute to Bill Pluemer whose fine articles and color photos in our newsletter draw attention and compliments of our readers overseas as well as nation-wide.

-----Josephine Shelby

ARIZONA PARKS GAIN FUNDING

Six national parks in Arizona will receive additional federal funding under omnibus parks legislation signed in November 1978 by President Carter. The Bill also creates a wilderness zone of 312,000 acres within the Organ Pipe Cactus National Monument.

1978 ANNUAL REPORT OF AFFILIATE REPRESENTATIVE OF THE TUCSON CACTUS AND BOTANICAL SOCIETY

Our exchange of newsletters with the following U.S. cactus clubs during 1978 successfully maintained our mutual friendships and helpfulness to each other: Houston, Texas. San Diego, Calif. Colorado. Los Angeles, Calif. National Capital C & S S . Maryland. San Jose, Calif. Las Vegas, Nevada. Detroit, Mich. New York. St. Louis, Mo.

We exchanged, with similar results, with these overseas societies: N.Z. C & S S . Christchurch, N.Z. C & S S . Hamilton Branch of N.Z. C & S S . Cactus and Succulent Information Exchange, British Columbia, Canada. England. Scotland.

Year long at our meetings I have reported news items from the AFFILIATE REPORTER which is a Cactus and Succulent Society of America, Inc. newsletter. These items announce the obligations that T C B S assumed when it became a C S S A affiliate. I reminded our president of the date when we must pay the affiliate fee and the Journal subscription. These are our annual obligations to be paid by check, promptly in line with their own deadlines. I have notified our president of the date when we pay to Desert Botanical Garden our sustaining membership fee. I also have notified our president that Arizona-Sonora Desert Museum has written us about their annual Gift-Giving Season 1978. The Museum expressed its sincere gratitude for our gifts in past years.

I arranged for local trips and entertainment for a group of English persons who wrote me for details for visiting Arizona cactus habitats. Our member, Vincent Lopresti of Sierra Vista, guided them on a 3-day cactus-collecting field trip to northern Sonora. Another of our interested members and I have answered inquiries from an English couple wanting to spend one month in the Arizona desert cacti habitats during spring 1979.

----------Josephine Shelby, Affiliate Representative.

CHATTER editor has received a Merry Christmas letter from Dale and Edith Morrical of Las Cruces, N.M. They report that they attended the annual Christmas Party of the El Paso, Texas, Cactus Club. One very beautiful and interesting feature of the party was a slide show of Medieval Paintings of the Christmas story..

BOTANIC GARDEN TAKING SHAPE IN SANTA FE CANYON, NEW MEXICO

A botanic garden, the first in the Santa Fe area, is taking shape on about 130 acres at the magnificent Randall Davey estate in the Santa Fe Canyon. The botanic garden, part of which is expected to open in 1979, will be the only one of its kind between Denver and Tucson. The land spans several animal and plant lifezones and abounds in wildlife ranging from native birds and small game to deer and an occasional bear. The Randall Davey Botanic Garden will include the plants already growing on the land plus others transferred to the land. The new plants will include Indian dye plants and Spanish healing herbs.

18TH ANNIVERSARY OF THE FOUNDING OF THE TUCSON CACTUS AND BOTANICAL SOCIETY

THE HAAG MEMORIAL CACTUS GARDEN AT THE ARIZONA-SONORA DESERT MUSEUM

1978 marks the 18th year of the life of the Tucson Cactus Club which it was named originally. Through these several pages, we shall reminisce about our founding by "Cactus John" Haag; and about our dedicating the Haag Memorial Cactus Garden at the Arizona-Sonora Desert Museum to memorialize our founder. He passed away on Dec. 2, 1962. We use reprints from CACTUS CAPITAL CHATTER OF 1965 and 1971. Also we are interested in old photographs of past years.

CACTUS CAPITOL CHATTER

BREAKING GROUND FOR HAAG MEMORIAL GARDEN IN 1964
Tucson Cactus & Botanical Society members are, from left to right: "Piney" Wanner, Joe Brick, Paul Shaw- Curator of Plants at Desert Museum, Alan Mollison-Chairman of Project, Jack Meyer-President of club at start of Garden, Alice Wanner. (photo courtesy of Isabelle Meyer)

Vol. 1 1st Quarter 1965 No. 1

With sincere gratitude and deep appreciation, we dedicate this, our first edition, to the memory of John A. Haag. To his many friends and associates he was affectionately known as "Cactus John" and indeed he has been sorely missed.

He was born in 1907 and started his first Cacti collecting in 1928. As he was a self-educated botanist there were many disappointments and a lot of experiments involved. Moving from Minnesota to Tucson in 1955, he established a cactus garden at his home on Giaconda Way and made many collecting trips to fill it. John's wife passed away in 1957 and in her memory, he renamed his garden "El Jardin Botanico de Santa Clara".

At the time of his death Dec. 2, 1962 he was in the midst of transferring his property to the Tucson Cactus Club, unfortunately (for the Club) this was not consummated. He was the Founder of the Tucson Cactus Club and helped to organize it in Dec. 1960 and was elected Treasurer and Director of Public Relations.

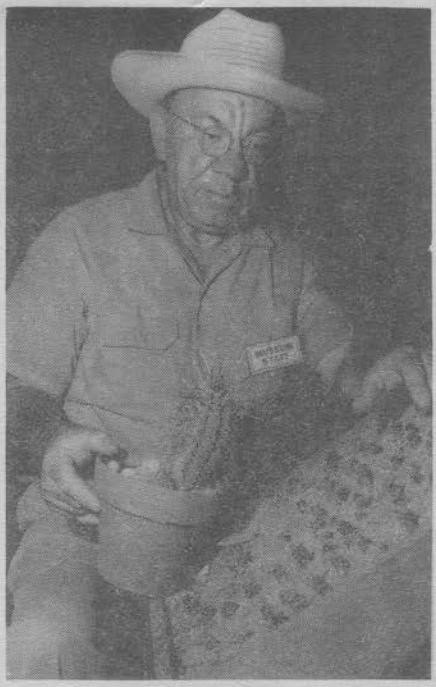
John had a very complete Botanical library, devoted to Cacti and Succulents, many of them rare and out of print volumes, which he freely loaned out to members. The Memorial Garden at the Arizona-Sonora Desert Museum will be dedicated to him this spring.

CACTUS CAPITAL CHATTER

DEDICATION

Tucson Cactus & Botanical Society dedicates this issue of Cactus Capital Chatter to HAAG MEMORIAL CACTUS GARDEN at Arizona-Sonora Desert Museum. In so doing, we again honor the memory of our founder, "Cactus John" Haag. Also, we rededicate our interest and our physical efforts to the renewing and to the replenishing of this Garden which is a memorial to our founder, and "a source of pride and pleasure to us."..... ...Chatter Editor: Josephine Shelby.

VOL. VII 1971 NO. 4



"CACTUS JOHN" HAAG
Founder of Tucson Cactus Club 1960

HAAG MEMORIAL CACTUS GARDEN AT THE ARIZONA-SONORA DESERT MUSEUM

Founders

In May 1965 the Tucson Cactus and Botanical Society dedicated the Haag Memorial Cactus Garden at the Arizona-Sonora Desert Museum in honor of its founder "Cactus John" Haag. Jack Meyer was President of the Society when the Haag Garden was started, and Hugh Copenhaver at the time of the dedication.

Allan Mollison was chairman of the first Haag Garden Committee, and under his direction, concepts and plans for the garden emerged. Among those who gave ideas, sweat and blood, along with Mr. and Mrs. Mollison, were Mr. and Mrs. Jack Meyer, Mr. and Mrs. Leo Wanner, Mr. and Mrs. Roger Dean, Hugh Copenhaver, Joseph Brick, Roy Doss, P. G. Nichols, Anton Nosek, Harry Bolenski, and George and Bernice Renie.

Society-Museum Joint Understanding

Arrangements were that the Museum would provide a choice location within its grounds for a cactus garden dedicated to John Haag who had also contributed much to establishment and development of the Museum, and that the Society would plan and design and help create the garden, collecting and preparing plants and seeing to it that they were identified and displayed well. The Museum imposed only one restriction-- the one it imposes on itself with respect to all of its displays--that the plants used must be native to Arizona or Sonora, or both.