

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY
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"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."

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TCBS AND THE YEAR AHEAD

1974 begins with grave uncertainties. It is not at all clear as yet whether Tucsonans--and others--will be able to move about as freely as they have heretofore. The new situation could make a difference in TCBS activities. Among other things, it could cause people to have a greater interest in their cactus windows, their cactus greenhouses, their cactus yards, their cactus gardens, and their cactus state. It could cause our monthly meetings and other functions to serve a stronger and a more important role.

As the new year begins, let me call attention to TCBS objectives as stated in our By Laws. They are: (1) to function continuously in the study of cacti and native flora, (2) to further the protection of cacti and native flora of Arizona, (3) to sponsor a botanical garden in Pima County near Tucson, and (4) to make planting of cacti and native flora in other suitable places. These, of course, could be changed, but they impress me as being entirely adequate for the period immediately ahead.

Our opportunity to enjoy native flora remains great, and the need to protect it also remains great. There are things to be done and people are volunteering their imagination and their efforts. Fine leadership is developing in committee groups. They deserve congratulations and encouragement at the same time.

Paul S. Henshaw, President 1974

Dr. Paul S. Henshaw is the author of a recently published book, "The Evolutionary Imperative". It is a thoughtful discussion of the problems facing man and the world today, and it proposes solutions to these problems. Mrs. Lois Clarke has donated a copy of this book to the Cactus Library for the use of all its members.



Tucson Cactus & Botanical Society



NEW EVENING PROGRAMS

Under the leadership of Dr. Paul S. Henshaw, President 1974, TCBS a new series of evening programs is offered to the General Public and all members and friends of the TCBS.

The THREE PROGRAM SERIES entitled:

THE DESERT STORY

will feature the following under the Chairmanship of Miss May L. Watrous, Phone : 326-0631 :

I. Thursday Jan. 31, 1974 8:00 p.m.

Speaker: Dr. Gordon Bender, Prof. of Zoology, A.S.U. Tempe will show a SOUND FILM:

DESERT FASCINATION

This lecture will emphasize ... the desert ecology and how the deserts were formed. Dr. Bender is noted for his great knowledge of the ecology of the Sonora Desert and has been working in this field for the past 13 years.

II. Thursday Feb. 14, 1974

Speaker: Dr. Warren D. Jones, U. of A.

will present a slide lecture:

LANDSCAPING WITH DESERT PLANTS

This lecture should be of special interest to home owners who want carefree landscaping and conserve time, energy and water.

III. Thursday Mar. 21, 1974 8:00 p.m.

Speaker: Mr. Verne L. Owen, Horticulturist and retired Supervisor of the Public Schools Nursery Plant, will present a slide lecture:

DESERT WILDFLOWERS & CACTUSFLOWERS

Mr. Owen is well known for his "Green Thumb"

Program on Radio KTUC. He is on the air every

Saturday at 8:15 a.m. and every Monday at 9:35 a.m.

All lectures will be held at the auditorium of the Physics and Math. Building at the University of Arizona.

NOCHARGE ±±±±±±±±±±±±±±±±± THE T C B S DECEMBER MEETING was the annual covered-dish pot-luck Christmas picnic. How fortunate we were to be invited to gather this year on the patio of Mrs. Carol Almquist's beautiful home. Tables set up around the pool were loaded with many goodies. Each person received a boutonniere made from silvered twigs of yucca pods, tied gaily with red bows. Even the weatherman cooperated, although he did send some gusty breezes. The more than 40 youngsters, aged 1-1/2 to 7-1/2 years, at the Pre-school Exploratory Center for Cerebral Palsy and Neurological Impairment in Tucson, were the recipients of Our Christmas giving this year. Our members responded with many, many gaily wrapped toys and \$45.00 in cash. These were delivered to the Center in time for its holiday children's party. The Director sent T C B S a sincere letter of appreciation. After eating lunch many cactophiles enjoyed walking through Mrs. Almquist's interesting cactus gardens and extensive desert area. -----Christine Henshaw, Picnic Chairman. CACTUS DIGGERS INVADE NATIVE CACTI HABITATS. Fortunate and privileged are Tucson cactophiles who can collect native Arizona cacti in their habitats. Members of T C & B S who did just this on December 1, 1973 were: Alma Steininger, Mr. & Mrs. Ed Busch, Mr. & Mrs. E. D. Clifford, Paul and Chris Henshaw, Alan and Betty Blackburn. The roadbed of a by-pass section of Arizona Highway 77 near Oracle in Pinal County offered hedgehogs, barrel cacti, coryphantha recurvata, yucca, sotol. After digging for such treasure, these Tucson cactophiles ate lunch and rested in the beautiful Oracle sunshine on Jo Shelby's Then they accepted the invitation of Alice Murphy of Oracle, to visit her extensive hillside garden and conservatory filled with succulents of many varieties. PLANT SALES. The sale of cactus plants and the plant auction have have been a gradual development over the years. Sales of cactus and other succulent specimens at club meetings constitute a worthwile club activity. (1) They

provide the opportunity for club members to strengthen and expand their own collections at a cost lower than store and florist prices. (2) They allow club guests and winter visitors to get mementoes of their stay in beautiful Tucson or to send back to their less fortunate friends at home. (3) They

add to the club treasury, and thus help pay for the free distributions of plants and plant door prizes. The white hairy varieties such as cephalocereus senilis and espostoa lanata have proved most popular. Mammillarias and gymnocalyciums in bud or flower sell like hot cakes. We are able to buy plants at wholesale prices. Club members can also offer plants for sale. The club gets from 25% to 50% of these sales. The annual plant auction is an exciting event. Most kaktophiles are a generous lot. Have you ever visited a friend's collection without being

offered spare plants, slips, cuttings, seeds, or just helpful advice? The auction gives club members a chance to donate their surplus plants to the club. The auction consists of bidding for a specimen by writing your name and bid on a slip of paper attached to the plant. The last name's highest bid on the slip when the auction is closed gets the specimen. It is great fun to see how other people evaluate your plant donations. I suspect that

some members up the bidding on their own donations to boost the price:

However, the shrewd buyer can garner many bargains. Nearly everyone gets some attractive plants. Our recent auction netted the club about \$88.00. FOR BAJAMANIACS: The famous Baja 1000 Mile Road Race is held every November on rugged terrain from Mexicali to southernmost Baja Peninsula. This race is being probed to see whether it is convenient for the Peninsula's ecology. Talks have been held with the Road's organizers and with travel industry officials in the U.S., to draft possible future regulations for the Race. It has been found that some of the vehicles in the race destroy the vegetation and the terrain. Carlos Rivapalacio of the federal tourism department states

that they do not want their scenery to be damaged because it is the largest

asset they have to attract tourism.

Second Curtain

IT WAS A magnificent spring show. Early in February, blue ribbons of lupine appeared along the roadways, putting the sky to shame. Soon the chilly shoulders of all the highways were wrapped in colorful scented scarves — yellow and purple, pink, white, lavender.

By March, hillsides were a-shimmer with the spilled treasure of golden poppies. Each spring-loaded day exposed yet another vein. Every gulch ran riot with the unpannable gold

Incredibly, after six reticent years, the Joshua tree made blossom-promises as fragile and translucent as fine painted china; and, in the following weeks, they fulfilled their word, sending bold flowers out to capture the heart of every trespasser in the desert.

Act One stretched into May, into June. Palo Verde foamed and frothed across the desert as buds burst like bath bubbles, obscuring the lower vegetation beneath great golden clouds. The scratchy dishpan hands of the ocotillo raked the tender underbelly of the sky with crimson nails.

It was all there. The plastic perfection of the clear-eyed pricklepoppy. Fiery globules of orange mallow: Roasting marshmallows on a stick bursting into sudden flame. Velvet antlers of the staghorn cholla, maroon to cherry red to cerise. Yellow staves of the



barrel cactus. Belated Easter bonnets, glossy white, jaunty on every saguaro head. Citrine cups waiting to fill with the fruit of the prickly pear that in a few months will produce the life-saving nectar so dear to the resourceful Papago. Agaves: green, orange and yellow pincushions mounted on a recycled wrought iron stand, like a dreamer's dream of old junk refashioned into art and sold at mind-clotting prices. Creamy yuccas, heady with their own graceful beauty.

When, the old-timers ask, was there ever such a show as this?

Yet I remember a September, not so long ago, when the Coconino forest floor was carpeted in butter-soft yellow. As we drove north, bluebell skies flattened to steel, as if over the open range they could no longer sustain the rich color they had bled from the blue-green needles of the pine forests.

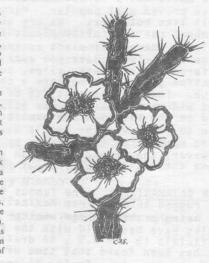
I remember gentle valleys and high terraces of coral and moonstone and silver, of faded turquoise, opal and gold, with splashes of fire where a shower of amethyst had magically transformed weeds into asters and thistles into magenta flames.

The forest thinned, black road torn from a ragged yellow cloth of sunflowers, black eyes as bright as a cricket's chirp joined by a chorus of rainbow colors. Beyond the Coconino, a desolate kind of grandeur: sage and red dirt and stunted evergreens, squatting defiantly like fat dwarfs as we dropped towards Winslow's lower elevation. White-faced cows as stolid and contented as cans of milk. A single white cloud, sailing on the horizon like the silvered negative of Shiprock

A freeway blur from Winslow to

Flagstaff, and then the welcome swapping for a gentler pace. From Flagstaff to the Sunset Crater road, we thrilled to a floral tapestry Minerva herself might have woven, with thread of sunlight and jade, hoarfrost and champagne.

Bonita campground: the perfume of crackling pine logs in a blaze of orange and blue-tongued flame while Sunset Crater slept in darkness somewhere beyond, as it had slept 905 years of nights. The lonely baying of nighttime predators, the confused



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BY SPARKY ASCANI

Illustrations by Chris Schreiner

whsh, whshk of a small owl confounded by the ivory beam of our light. Stars winked at their own cleverness in banishing the lopsided moon as it slid down its black runway into the trees and disappeared over the lip of night.

By day, Bonita was mullein shafts of sunlight and bouncy discs of golden groundsel lighting the volcanic way, the rare blush of wild geraniums. Sunset Crater itself bloomed pink and Oxford grey, its cinder base roughly textured with coral bells and tiny purple spikes; Indian paint brushes gaily splashed Chinese red on a charcoal canvas. Looking back, the white, windblown cloud-collars of the San Francisco Peaks were all askew.

Our pickup gnawed lazily at the blacktop road. We swerved to avoid an Abert squirrel frisking in grey and white jumpsuit. Lonely little pygmy trees bowed sadly as we passed.

Highway 164 to and through the Hopi Indian Reservation. Arid cornfields like stunted orchards. Corsages of pink and white pinned tightly to the shoulder of the road, compelling a closer look: half buds hanging in weeping pink bells with gold-filigree clappers, opening angel white. What can they be?

High mesas crawled away from the road in nubby tweed of mustard green to disguise their drabness; gradually, rejuctantly, surrendering to other ragged confields more tattered than the scarecrows that guarded them. Squash and beans grew like warts on a brown toad.

New rains had washed the clouds to fluffy white and put bluing into the sky as we moved toward Canyon de Chelly. Freshfilled stock tanks were flung down on Indian farms and rangeland like drops of quicksilver carelessly spilled on a scientist's lab bench. Mesas, usually naked and as brown as their Hopi and Navajo landlords, looked as if they'd just stepped from a refreshing shower, wrapped now in a thin green towel, gaily bordered.

Once again we moved toward the Coconino, homeward bound. Tom Thumb groundsels and sweet clovers tiptoed across the fields in golden silence to disappear into the fading woods beyond. Thistles floated like purple buoys in a sea of foaming white. Now and again a preposterous clump of maroon and yellow gaillardias shattered the harmony as surely as if they had shouted.

Truly, Arizona's annual flower show is no one-act play. I can hardly wait for the second curtain!



"THE AUSTRALIAN "WONDER PLANT"

On the second Program of "Meet the Artists" Series sponsored by the University Hospital Auxiliary, I was honored to be the speaker and show part of my cacti and succulents collection. The interest was keen and questions on caretaking were prevailing. I also made some "by the way" advertising for TCBS and hope some new people will show up at our meetings. One "little old lady" from Globe got me all worked up about a plant she had from Australia. "Oh, no, it's not a cactus," she said. "It's a succulent with large bell-shaped flowers." Well, she was very nice and sent some cuttings. Very excited, I opened the package with the "Australian Wonder Plants". There they were!!!! ----Three Echinopsis Pups!!! No comment!Hildegard Nase

REPORT ON MEN'S GARDEN CLUB SHOW*******CHRISTOPHER CITY*****NOVEMBER 17, 18,1973

TCBS was a guest exhibitor at the annual 1973 Men's Garden Club Show. Alan Blackburn brought 25 plants and Hildegard Nase 32 plants to represent our Society. The plants were set up in the lobby on two large tables, the first thing for visitors to see! We grouped the plants to species: Aloe, Stapelia, Faucaria, Astrophytum, Turbinocarpus, Cereus, Echinocactus, Parodia, Crests and Grafts, and Mamillaria. A yellow ribbon Special Award was given to TCBS for this exhibit. Members showing plants for judging in the main hall were: Helen Houseman 8 Plants. Louise Hillgert 2 Plants. Alan Blackburn 1 Plant. Hildegard Nase 2 Plants. Members Awards: First Prize: Louise Hillgert: Euphorbia splendens. Hildegard Nase: Euphorbia obesa. Second Prize: Alan Blackburn: Aonium haworthia. Helen Housman: Agave unavatata. Third Prize: Helen Housman: Aloe brevifolia.

THE LAND PLANNING COMMITTEE OF THE ADVISORY COMMISSION ON ARIZONA ENVIRONMENT recommended on January 19, 1973 "That the Advisory Commission on Arizona Environment support the existing Native Plant Law as revised by the 1972 session of the Arizona State Legislature. It is the opinion of the Commission that the law is adequate and serves its intent to protect various native plants as listed in the law. Furthermore, recognizing that, by law, the Arizona Commission of Agriculture and Horticulture must hold a public hearing each year to establish regulations to implement the Native Plant Law, and in this manner any Arizona citizen may give testimony concerning his beliefs and opinions, the Advisory Commission on Arizona Environment finds that the above law and procedures are adequate and should not be revised until thoroughly tested

On January 13, 1974, Mr. Don Baine from the Office of the State Commission of Agriculture and Horticulture, spoke to the TC & BS on the subject of <u>Native Plant Preservation Laws in Arizona.</u>

THE Y.W.C.A.'S 1974 TRAVEL THROUGH PHOTOGRAPHY SERIES includes programs presented by five excellent Tucson photographers who belong to TC & BS: Lillian S. Fisher, Lura and Lee Fuller, and Mr. and Mrs. B. N. Smith. The following are their programs:

Jan. 23. Last year, following on the heels of heavy winter rains, desert wildflowers produced a historically showy display. Lillian Fisher captured the flowers on film.

Feb. 6. Desert birds and animals in their desert homes, environment, and cactus in bloom are all a part of Mr. and Mrs. B. N. Smith's "Life on the Bloomin' Desert."
Feb. 27. The picturesque lake region of northern Italy and the Austrian Tyrol

Feb. 27. The picturesque lake region of northern Italy and the Austrian Tyro make up the "Romantic Roads of Europe", by photographers Lura and Lee Fuller. THE JANUARY DOOR PRIZE WAS ASTROPHYTUM ORNATUM. It has 8 ribs and stiff yellow-brown spines. The body is green and sprinkled with white dots. Flowers are yellow and appear in the summer. It rarely forms offsets, but does grow easily from seed.

There are four distinct species of Astrophytum and all come from Mexico. Ornatum grows farther south than the others; therefore, it is not always hardy in Tucson. It depends upon the severity of the winter and whether the plant is in an exposed or protected location. To be on the safe side, it is better to consider it a "pot" plant and bring it inside in the winter.

It adapts well to "pot" culture for it grows rather slowly. This 8" plant is probably at least that many years old and most likely is closer to 15 or 20 years. While the reference books state some of these plants eventually reach a heighth of three feet, no author I encountered ventured a guess as to how long it takes to get that high. I suspect it is many years.

Astrophytums all like a very sunny spot and a gravelly soil. This species is not too touchy on watering, so give it ample during the summer, plus regular light feedings.

The books list several varieties of ornatum, such as mirbelii, glabrescens, and glaucens. My impression is that there is little to distinguish these except for the quantity of white "freckles" and the ultimate size of the plant. -----Nancy Clarke 1-74.

<u>CACTUS CAPITAL CHATTER</u> will accept from members----reports on their plants; cacticulture; garden tips; book reviews; summaries from cactus publications; line drawings done in black on white paper. Mail this throughout 1974 to: Josephine Shelby, Box 375, Oracle, AZ, 85623. Also, hand to her at cactus meetings.

<u>CACTUS CAPITAL CHATTER</u> staff can use all-around, budding journalists, book reviewers, proof-readers, editorial writers, special feature writers, illustrators, accurate typists. See editor, Jo Shelby.

MEMORANDUM

TO: All T.C. & B.S. officers, committee chairmen, Board members. FROM: Editor, CACTUS CAPITAL CHATTER,

FROM: Editor, <u>CACTUS CAPITAL CHAITER,</u> SUBJECT: reporting certain news items during 1974.

Please turn in your own reports of activities, etc., that you deem pertinent news items for CHATTER. Please do this steadily as news items materialize. Keep in mind that CHATTER is published only quarterly. These news items will not be specifically solicited by the staff in 1974. If possible, type your reports, double-spaced. Legible handwriting is acceptable.

Mail this to: Josephine Shelby P.O. Box 375, Oracle AZ 85623.

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Hand to her at meetings.

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Mil gracias, amigo.

Please be specific, using names, dates, facts, statistics, etc.

1 9 7 4 Out-of State Subscriptions to CACTUS CAPITAL CHATTER are due at once. \$1.00 per year in U.S.A. \$1.50 per year to foreign addresses. Please make your checks payable to Tucson Cactus & Botanical Society. Your promptness is appreciated.



HILDEGARD NASE
(Courtesy of Tucson Daily Citizen)

THE NATURAL VEGETATION OF TAT MOMOLI in the Papago Reservation, Pinal County, was not disturbed by construction crews building the 2-1/2 mile long, 60-foot high earth fill Momolikit Dam. When completed, it will be the 6th largest of this type in the U.S. Roads which were diverted around natural vegetation on the site, will be replanted after the Dam is completed. Construction crews have had to follow strict environmental procedures, outlined by the U.S. Environmental Protection Agency. As an example of the painstaking measures to avoid disturbing the environment, the U. S. Corps of Engineers built an open-air observation building with materials either hand-carried up the 400-foot peak on which the platform stands or hauled up in a cable-drawn cart mounted on a narrow track. No roads were built on this spot. Observers will have to hike up

MEET HILDEGARD NASE

Mrs. Hildegard Nase specializes in growing cacti and many of the other succulents. She has a total of about 400 varieties now. regularly exhibits her plants in recurring annual garden clubs' flower shows in the Tucson area. See "The Australian Wonder Plant". She won an award of Merit for her entire cactus collection of 34 plants exhibited at one Fall Flower Garden Show of the Tucson Men's Garden Club. In this same Show she won First and Second Prizes for her other succulents. Last spring she entered the cactus competition in the Old Pueblo Council of Garden Clubs' Flower Show. She won 5 Firsts, 3 Seconds, 1 Third. Hilde-gard is an ex-president of Tucson Cactus & Botanical Society.

a narrow, winding pathway to reach the platform. (Quoted from The Arizona Daily Star, 1-2-74

DID YOU KNOW? At Helen Roubicek's it all began with a few plants in the house. Now, after 20 years, she has a countless number of large beautiful specimen cactus plants. Helen has created an artistic planting using her large and small plants in raised, rock-outlined beds. She also adds to her collection by grafting and growing seedlings. A visit to her garden is a must. Please call her first. ---Betty Blackburn Note: I am interested in suggestions for this column if members are interested in hearing about eachother's cactus collections and gardens. Please call me. --Betty Blackburn.

PEG AND COLONEL YOUNG added to their cactus collection during their summer trip to Canada, a tiny, "insignificant" prickly pear from Fraser River country. She says that its only merit is that it is from British Columbia.

ACTUS
APITAL
HATTER

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EDITOR FOR BAJA AND MEXICO

William Pluemer

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CIRCULATION William Plue Lura Fuller Lena Marvin-Paul Henshaw

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THE DESERT STORY LECTURE SERIES

The two evening meetings promoted thus far by the Tucson Cactus and Botanical Society under the general title "The Desert Story", reveal two important things: (1) that the Society can manage such meetings with success and with credit to itself, and (2) that the subject area being treated has a real appeal in the Tucson community.

Despite gas shortages and other competing activities, more than 150 people attended the first meeting, January 31, at which Prof. Gordon Bender, ASU, spoke on "Desert Fascination;" and more than 250 attended the second meeting, February 14, at which Prof. Warren Jones, U. of A., spoke on "Landscaping with Desert Plants."

The Board of Directors must now reach a decision about such meetings for the coming Fall and Spring seasons. Any views about them--whether they should continue, what their nature should be, etc.--should be conveyed to Board members.

-Paul S. Henshaw, President 1974

DR. GORDON BENDER'S LECTURE -- "DESERT FASCINATION"

The first lecture in the series of three evening programs presented by Tucson Cactus and Botanical Society was an outstanding success. Dr. Gordon Bender of ASU captured and held the close attention of the audience throughout his lecture and the accompanying film. The only criticism that I heard from anyone was that the film should have lasted much longer.

I think the thing that impressed me the most was the audience. The nearly 200 people who came were a most enthusiastic group with many young people present. They asked many questions and showed an unusual interest and appreciation of the efforts of the Cactus & Botanical Society in sponsoring these educational programs for the community. We hope they may have some effect in awakening interest and concern in protecting our desert with its unique plant and animal life. Such is our aim.

Dr. Gordon Bender explained that a desert is a place where the rate of evaporation exceeds the amount of rainfall. These areas exist 20° to 30° north and south of the equator. There is good reason for this. The air above the equator is very hot and hot air has two characteristics. It rises and it absorbs more moisture than cold air. As the warm air rises, it picks up moisture from the oceans, and when it reaches the colder air above, the moisture is precipitated in the form of rain. This causes a current of air, going north and south, which descends in the area 20° - 30° above and below the equator. The air holds very little moisture and, as it becomes heated, it picks up what little moisture it can get by evaporation, further drying out the area.

There is another reason for deserts. When the mountains were raised up along our Pacific coast, they shut off the flow of moist air, causing what is known as a rain shadow on the east side so that mostly dry air reaches Arizona. There is a similar situation off the west coast of South America where the cold ocean current precipitates the moisture from the air, and it falls out in the form of fog arriving at the land with most of its moisture leached out.

He explained how the unique plant community of the earth developed and why it is here. Plans moved up from Central America and down from farther north surviving only when the cold was not too much for them. It took millions of years for the evolution and development of our particular plants and animals. We see them now and marvel at all their wonderful adaptations to little moisture and much evaporation - from the accordian-effect of the saguaro to the thorns in the cholla which produce not only a barrier against grazing but shade for the plant (and bird nests) as well.

The film which followed the lecture was one of the best I have seen of our native animal and bird neighbors. Dr. Bender's commments in the film developed further his interpretation of the factors necessary for the survival of both plant and animal life in our desert. We are very grateful to Dr. Bender for giving our society and its friends such a rewarding and interesting evening.

----May Watrous, Chairman of Evening Programs.

THE FEBRUARY DOOR PRIZE WAS THELOCACTUS NIDULANS. The word "nidulans" means in a small nest, and this plant is commonly known as the Bird's Nest cactus. (So is a small mammillaria, which is a good reason to learn and use the botanical name.) Its older spines become frayed and shredded to give it this unique appearance. There are around 30 species of Thelocactus; most of them are native to Mexico. "Thelocactus" is a Greek word for nipple cactus. This is due to the ribs being cut into large tubercles.

Thelocactus nidulans is a slow grower but not a fussy one. It prefers a sandy mix and average watering. The spines will be more stout if it is grown in full sun. The plant body is bluish-grey and the yellow flowers appear in the summer. While reference books describe the mature plant as solitary and 7" across, Bill Pluemer says he has seen them growing in Mexico up to 11" in diameter and 6" high and in multi-headed clumps, so they apparently do form clusters with great age. It is hardy in Tucson and therefore may be planted in the ground.

DESERT LANDSCAPE PLANTS

From a presentation at the Second Evening Program of Tucson Cactus & Botanical
Society by Warren D.Jones

Tamarisk Arizona Cypress Desert Hackberry Emory Oak Arizona Ash Arizona Sycamore Alligator-Bark Juniper Native Mesquite Chilean Mesquite Ironwood Blue Palo Verde Little-leaf Palo Verde Mexican Palo Verde Sweet Acacia White-thorn Acacia Feather Bush Mexican Elderberry Desert Willow Willow Pittosporum Chaste Tree Texas Mountain Laurei Creosote Bush Hop Bush Purple Hop Bush Rosewood Sugar Bush Desert Broom Four-wing Saltbush Jo.joba Texas Ranger Bird of Paradise Dwarf Poinciana Trumpet bush Cassia Feathery Cassia Desert Marigold Fairy Duster African Daisy Lavender Cotton Brittle Bush Fountain Grass Hummingbird Flower Turpentine Bush Rosemary Bush Morning Glory Mexican Honeysuckle Queen's Wreath Ocotillo Yucca Yucca Yucca Desert Spoon Red Aloe Century Plant

Aloe

Tamarix aphylla Cupressus glabra Celtis reticulata Quercus emoryi Fraxinus velutina Platanus wrightii Juniperus deppeana Prosopis velutina Prosopis chilensis Olneya tesota Cercidium floridum C. microphyllum Parkisonia aculeata Acacia farnesiana A. constricts Lysiloma thornberi Sambucus mexicana Chilopsis linearis Pittosporum phillyraoides Vitex agnus-castus Sophora secundiflora Larrea divaricata Dodonea viscosa Dodonea viscosa 'purpurea' Vaquelinia californica Rhus ovata Baccharis sarothroides Atriplex Simmondsia chinensis Leucophyllum frutescens Poinciana gilliesii Poinciana pulcherrima Tecoma stans Cassia vislizeni C. artemisioides Baileya radiata Fallugia paradoxa apache plume Dimorphotheca sinuata Santolina chamaecyparrissus Encelia farinosa Pennisetum setaceum Zauschneria latifolia Apolopappus lacrifolius Resmarinus officinalis Convolvulus cneorum Jacobinia carnea (mexicana) Antigonon leptopus Fouquieria splendens Yucca brevifolia Y. elata Y. recurvifolia Dasylirion wheeleri

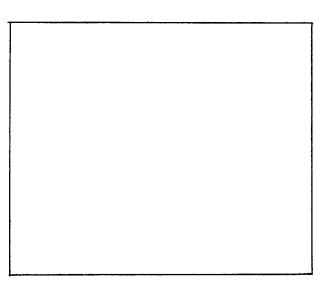
Hesperaloe parvifolia

Agave americana

Aloe saponaria

MAMILLOPSIS QUEST William A. Pluemer

Mamillopsis senilis has long been a favorite of cactophiles. Its dense white spine cover and tubular scarlet flowers create an exhilarating contrast during the spring blooming season. Britton & Rose, in their Monograph,



MAMILLOPSIS SENILIS IN SITU

note that the plant was originally classified under the genus Mammillaria about 1850. All the ensuing years have not brought great numbers of collected plants to the market. Not only is Mamillopsis senilis somewhat difficult of cultivation, it seldom produces the quantity of seeds necessary for wholesale marketing.

The known range of the plant has continued to expand as collectors penetrate further and further into the vastness of the Sierra Madre Occidental. Backeberg, in Das Kakteen-lexicon, 1970 lists the states of Chihuahua, Durango, Nayarit and Oaxaca.

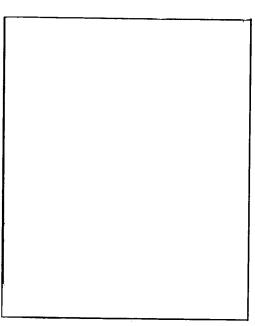
Probably the best known, easiest of access, and most over-collected area occurs along the Durango-Mazatlan highway about

70 miles out of Durango. Vol. XXXVI (1964) page 66 Cactus and Succulent Journal contains a habitat photo taken in this area. In November 1973 we found a few individual and rather sickly culls near the highway here. Without question, if one were to hike to adjoining ridges, the plant population would increase in direct proportion to the amount of effort expended. Clambering about steep rocky ridges at altitudes above 7000 feet can be strenuous, so Conservationists might offer a silent prayer of thanks to the vast majority of cactus enthusiasts who limit themselves to what I term "car door" collecting.

Never having collected mamillopsis and wanting desperately to learn more about its environment and growing habits, I undertook in October 1973 a quick 1250-mile round trip to satisfy these needs. The town of Choix, about 85 miles northeast of Los Mochis, was our jumping-off spot. Bidding adios to the pavement at this point, we settled back for 43 miles of hard mountain driving, climbing, winding and grinding through spectacular vistas. Our destination was the end of a logging road terminating in the village of San Vicente, nestled in the pines at an altitude of some 7300 feet. Mamillopsis does not occur below 6000 feet in these latitudes, so we were not disposed to make early attempts at finding it. Altimeters crept slowly upward as the hours slid by. Sheer cliffs of hundreds of feet stood guard over nature's domain as we gingerly threaded our way toward the magic altitude. Our first sighting came at 6300 feet on the downside slope where a large cluster of globular white plants shone in the sunlight. "Mams!" I cried. "Mamillopsis!" corrected Dr. Archie Deutschman.

Slipping and sliding down the slope, I came to rest (fortunately) against a giant granite boulder bearing the crown of plants. Here my first mamillopsis cluster "in the wild" measured almost 2 x 2 feet and far exceeded in form, color, and vitality anything I had seen in cultivation.

As the afternoon wore on, it became obvious that the affinity between boulder and plant again demonstrated one of nature's delicate relationships. M illopsis occured only on these huge granite boulders, firmly embedded in a carpet of mosses and lichens whose soft pastels were freely splashed by the Great Painter. Using gloves, I found it possible to slide a hand under a cluster and lift it completely and cleanly from the underlying rocks. Drainage and acidity provided by the moss, leafmold and pine needles appear to be paramount in the growth of this plant. Further toward the crest, we entered a steep hairpin turn. Here the upslope was studded with a magnificent boulder outcropping from which grew a veritable hanging garden of mamillopsis. Shafts of sunlight picked out random clusters from the forest background as if to hold them forth for our approval. If, for us, there really exists that great cactus garden in the sky, surely we were here given a glance through a crack in the garden fence!



SAN VICENTE VILLAGERS

3 - 74

In the village next morning we were surprised to learn that we were in the state of Chihuahua, having left Sinaloa somewhere down the road. My hopes for being able to update Backeberg were dashed; something soon forgotten in the excitement of the moment. Returning through Choix to El Fuerte, we paused to admire a sizeable organ pipe cactus defiantly sprouting from high on the El Fuerte church belfry. Pigeons? Trick or Treat? A profound question. Enough reason to travel the road again - perhaps in the spring when mamillopsis will favor me with a burst of scarlet.

THE MARCH DOOR PRIZE WAS SOEHRENSIA BRUCHII. It was discovered by Dr. Bruch around 1907 in Argentina. It used to be called a Lobivia which gives you a hint as to its appearance and culture. However, unlike most lobivias, it forms a very large single head, up to 12" in diameter, and seldom clusters. The spines are straight and brownish, and the flowers are a lovely dark red on short stems. It is easy to grow and does well in most soils. Plenty of water should be given in warm weather and even in the winter it should not be kept too dry as it is a South American species. It is hardy in Tucson so may be planted in the ground. While it takes full sun and will produce stouter spines, the body color will be greener in partial shade. Under a palo verde tree would be an ideal location.

-----Nancy Clarke

IN MEMORIAM

Col. Henry H. Jones

Our Friend Loyal Member of Tucson Cactus and Botanical Society

March 3, 1974

1974 ROSTER TC & BS OFFICERS AND COMMITTEES

OFFICERS. President - Paul Henshaw. <u>Vice President</u> - Richard Wiedhopf.

Co-Secretaries - Mr. and Mrs. J. Vick Merrill.

Treasurer - Lois Clarke.

BOARD OF DIRECTORS: Thomas Kesson. Carl Horst. Hildegard Nase. Alan Blackburn. Josephine Shelby. Roger Dean. Edward Busch. Vick Merrill. Richard Wiedhopf. Paul Henshaw.

AFFILIATE DIRECTOR. Josephine Shelby.

STANDING COMMITTEES.

Program - Richard Wiedhopf.

Refreshments & Hospitality-Anne Christensen Julie Porter, Kay Stehulka.

<u>Membership</u> - Helen Housman.

Publications - Josephine Shelby,

Publicity - Ruth Dougherty.

Lura Fuller, Lena Marvin.

<u>Historian</u> - Dorothy Levering Haag Garden - Edward Busch.

<u>Cactus Show</u> - Alan Blackburn.

Door Prizes - Helen Busch.

<u>Librarian</u> - Nancy Clarke

SPECIAL COMMITTEES.

Legislative - Carl Horst, Lillian Fisher. Botanical Garden - Paul Henshaw, Thomas Kesson, Alan Blackburn. (Harrison Yocum, Carl Horst). News Column - Nancy Clarke, Ruth Dougherty. Cactus Classes - Alan Blackburn. Evening Program - May Watrous, Alan Blackburn, Nancy Clarke, Hildegard Nase, Dorothy Levering. Speakers Bureau - Betty Blackburn, Dorothy Levering, Julie Porter, Josephine Shelby, Edna Zeavin. Highway, Street and Parks Landscaping - Edward Clifford. Tours - Thomas Kesson, Thomas De Haven, Miriam Dilatush. Seeds. Seedlings. Reforestation. Auction. Swap. Sales. Barbara Rogers,

<u>Seeds. Seedlings. Reforestation. Auction. Swap. Sales.</u> Barbara Rogers, Gretchen Kunze, Helen Roubicek, Edward Clifford, Alma Steininger, Georgia Fisher, Roger Dean, Wilfred Murch, Nancy Clarke, Elsie Niehus, Kay Brown,

Pauline Frans.

IMPORTANT: NOTE THESE NEW ADDRESSES. Cactus & Succulent Journal and Abbey Garden Press, 1593 Las Canoas Road, Santa Barbara, California 93105. Abbey Garden Nursery, Box 30331, Santa Barbara, California 93105.

ANNUAL CACTUS SHOW OF TUCSON CACTUS & BOTANICAL SOCIETY. The 1974 setting

for this Show is the Rotunda in the El Con Mall. The large circular garden under the dome will be encircled by display tables holding the potted cacti and other succulents of those TCBS members whose serious interest stimulates them to exhibit many of their finest plants. On April 12 and 13, during the hours of 8:00 a.m. - 10:00 p.m., several thousand Tucsonans who are Easter shopping at El Con, will find themselves pleasantly and profitably sidetracked by this surprising and exciting Cactus & Succulent Show. Plants and seeds will be sold. Show chairman is Alan Blackburn. Dorothy Levering and Hildegard Nase are in charge of publicity. Barbara Rogers is responsible for the seedling and plant propagation Table. Nancy Clarke will direct plant sales. (r.)

MEMBERS: Call Alan Blackburn about HOW TO EXHIBIT YOUR PLANTS IN THIS SHOW!

MARCH MEETING. On March 10, TCBS members were guests of Mr. George Brookbank at the Tucson Garden Center 4040 North Campbell Avenue. He conducted them on a guided tour of the Garden Center and explained proper horticultural practices for successful gardening in desert environments. Mr. Brookbank is Horticulturist for the Pima County Cooperative Extension Service. (r.)

TWENTY-SEVENTH ANNUAL CACTUS SHOW sponsored by the Phoenix Gazette and the Desert Botanical Garden, was held February 17-24 in Webster Auditorium at the Garden in Papago Park, Phoenix. Sweepstakes were awarded for the most Blue Ribbon Awards accumulated in the first four sections. Ribbons for 1st, 2nd, 3rd, and Honorable Mentions were awarded, when merited, in all classifications. Small trophies were given for outstanding exhibits in the various classes. The Standard system of Judging was used. The decision of the Judges was final. A member of Tucson Cactus & Botanical Society, Alan Blackburn, was one of the judges. (r.)

NANCY CLARKE IS PUTTING TOGETHER AN ALPHABETICAL FILE of information on the growing conditions for cacti and other succulents; plant descriptions; ideal locations for plants; pictures and diagrams; grower's own experiences with their plants. Plants are being filed as to genera. She is using authoritative information that she has gained in reading a number of cactus societies' publications. For further details, talk with Nancy Clarke about this. (r.)

FOR BAJAPHILES. Anita Espinosa of El Rosario, Baja, has undergone further surgery lately. She is now enjoying a long, enforced rest, probably in Hermosillo, Sonora, Mexico. In her absence from her well known posada in El Rosario, Lilly will attempt to keep business as nearly normal as she can. Anita is famous for her hospitality and her excellent Mexican cooking. Also, she has far-ranging interests, with a good knowledge of the flora and archaeology of Lower California. She shows her guests with pride her outstanding collection of old Indian tools and pottery. We hope the best for her and all our good Mexican friends there. -- Carl Horst.

SHAMPOO YOUR OLD MAN! CACTUS, THAT IS! Do you know that you can? A weak soapy warm water wash will do no harm. It will give the plant a clean, white appearance. The soil in the pot should be covered with a paper or a cloth to keep soapy water from saturating the soil when the plant is laid on its side. In giving a shampoo, the hair should not be rubbed too hard, or in the opposite direction in which the plant is growing. Otherwise a bald "Old Man" may result. After the shampoo, a wash in clean, clear water completes the operation.

IMPRESSIONS OF A NEW MEMBER

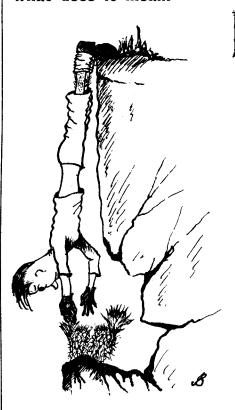
I am a recent member of the Tucson Cactus and Botanical Society, having joined late last spring. I first discovered the club while doing research for a cactus poaching article. I had difficulty finding anyone interested in cactus conservation until I spoke to a librarian at the Wilmot Library. She mentioned the Cactus Club and brought out copies of the Cactus Chatter.

All cactus club members were cooperative when I phoned them for information. Having taken a Cactus and Succulent course at Arizona State University, I was definitely a good prospect for membership.

My impressions of the club are first, of some outstanding personalties I have met so far, and next of the fine educational programs presented both in and out of the meetings. Joseph Brick is exemplary for his work in cactus reforestation, and seems to retain his humility even after commendations by Mrs. Nixon and Mrs. L.B. Johnson. I was impressed with the Blackburns cactus-lovers paradise, and was educated by one of their workshops on cactus seed germination. I had heard that Alan Blackburn was the cactus expert in the Tucson area. Best of all, the Cactus Chatter editor does a tremendous job in recording extensive cactus information.

The educational programs at the meeting seem to be enlightening, both to novices and to more experienced cactophiles. A big attraction are the free plants, or those given away at a nominal cost. At my first meeting, I drew a large cactus as a doorprize. I participated in the cactus auction, but lacking money at this time, I saw my prized selections snatched away by the more affluent members:

What does it mean?



Drawing by John Benger

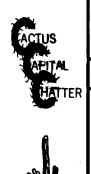
Type-locality

The place at which a species or variety was first found. Recording the type-locality in the first published description of a plant is most necessary, though understandably, some authors are deliberately vague on this point when they believe their discoveries to be very rare in the habitat.

The Nat'1. Cactus & Succ. Jrnl. Vol. 26 No. 1. England

The effort to involve all members in committees is an excellent idea. My only two suggestions are as follows. I would like to see a few younger members at the meetings to temper the society with their enthusiasm. Also, I have a personal conflict with Sunday afternoon meetings because I must sometimes make a choice, between a church meeting or a cactus club meeting. Really, I am very pleased with the benefits accruing from my membership.

------Edna Zeavin.



NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY
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"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."

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A DESERT PLANTING PROJECT IN GREEN VALLEY
THE DESERT REJOICES AND BLOSSOMS AS THE ROSE IN LA CANADA DESERT HOMES
WHERE

ED CLIFFORD AND HIS NEIGHBORS LANDSCAPED WITH NATIVE ARIZONA PLANTS OTHERWISE DOOMED TO DESTRUCTION

In 1970, the Green Valley Development Corporation plotted an unusual home area, La Canada Desert Homes, unusual in that the lots were to be round and 80 feet in diameter. No two lots were to have a common boundary. The land between each lot and between lots and the streets was to be community property owned by all of the homeowners in the site. The next unusual feature of the area was that as far as possible, all native trees, shrubs and cacti were to remain untouched. In many cases, the streets were curved to save a mesquite or a paloverde tree.

Building homes in "A" Section of this site was started in late 1970. mid-1972, all of the 80 plus lots had homes on them. The owners were landscaping with cacti and other desert plants. In early 1973, Mrs. Rodgers of the Beautification Committee asked me to prepare a landscape plan for the entrance to La Canada Desert Homes. This plan calling for the use of desert plants was accepted, and work started in early spring. Prior to our starting the planting, I consulted with Joe Brick, Alan Blackburn and other TCBS members about proper methods of moving desert growth. Steininger of Green Vallev and several other TCBS members gave us plants and names of persons in Tucson who had desert plants that we could have for moving them. By the middle of May, over 100 cacti, Texas rangers, agaves and other plants had been placed along most of the streets and small parks on the 26 acres of community property. Many of the cacti were cuttings. This was only a start as there was need for barrels, hedgehogs, Santa Ritas, saguaros, and desert shrubs and trees. Through the TCBS, some hedgehogs were obtained from the right-of-way of a section of highway being constructed. Through the Arizona Commission of Agriculture and Horticulture, we were able to secure permission from Sierrita-Duval Mine to dig cacti and other desert plants from an area where mine spoils were being dumped. Armed with a sack of plant inspection tags, the volunteer

planting crew journeyed to the mine five times to bring back barrels, hedgehogs and ocotillos. These, along with plants donated by many Green Valley residents, were planted during the winter months. In spite of all this planting, there is a need for more deciduous trees and shrubs, saguaros and rainbow cacti. If members of TCBS know where these are available, please let me know. As the desert contains many plants other than the cacti and mesquite trees, etc., seeds of Mexican poppies, lupines, owl clover, brittle-bush and other desert wildflowers were collected and sown in various spots in the area. In spite of the dry season, many seeds germinated and many plants bloomed.

This planting project is unique also, because all of the labor was per-f formed by area residents. Each property owner did his own bit toward watering and caring for plants. Hedgehogs that had been planted for only a short time, bloomed. This created a feeling that after all it was a most worthwhile effort—that desert plants DOOMED TO DESTRUCTION can be rescued to live out their lives providing beauty to their surroundings, and creating pride in the residents of La Canada Desert Homes. In addition to beautifying the area, a by-product of this project was the opportunity of becoming better acquainted with one another, and the developing of a spirit of neighborliness and good-will.—Ed Clifford.

The Board of Directors of La Canada Homesites Association officially thanked "Shorty" Clifford for all his work and enthusiasm and devotion in beautifying community property there. He developed a fine letter of instructions to Homeowners on how to care for their cacti and all desert plantings.

SOUTHERN ARIZONA'S NATURAL GARDEN OF DESERT PLANTS IN BLOOM was acclaimed the best of the "Garden Spots of the United States", by a group of foreign newspapers and magazine editors on a tour with that title recently. Editors from Paris, London, Hamburg, Mexico City and Tokyo visited Tucson on a tour sponsored by the United States Travel Service. They took a thousand pictures at Saguaro Monument, and they said this was the best place of all.

DESERT PROTECTION NEEDED From The New York Times...

Interior Secretary Rogers C. B. Morton has announced plans to give greater protection to three outstanding federal wildlife refuges in the deserts of the Southwest.

At Kofa and Cabeza Prieta game ranges in the ruggedly scenic Sonoran Desert of southwestern Arizona, the Bureau of Sport Fisheries and Wildlife would be given long overdue jurisdiction over management of the natural environment. At present it shares administration of these refuges with The Bureau of Land Management.

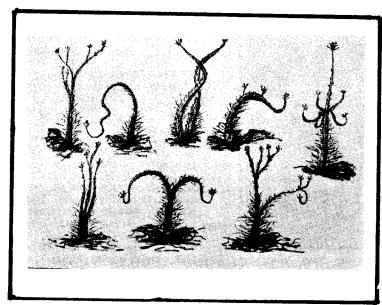
Both areas and the Desert National Wildlife Range in the southern Nevada section of the Mojave Desert would be withdrawn from further mineral entry under the 1872 mining law. And all three ranges would be enlarged to include important adjoining desert-wilderness lands and wildlife habitat of such species as the desert bighorn sheep.

With the relentlessly increasing pace of man's destruction of the fragile desert regions, Secretary Morton's proposals to enlarge and increase the protection of these key desert reserves deserves enthusiastic public support. They are opportunities that may never come again.

-----ARIZONA DAILY STAR, April 10, 1974.

DESERT STILL UNHEALED AFTER MILITARY TANK DAMAGE. OFF-ROAD VEHICLES.

The scars left by military tanks during World War II still mar the Yuma, Arizona desert landscape according to Bureau of Land Management officials. Such unsightly reminders of man's presence and abuse are inevitable in desert areas because it takes up to 50 years for dry, low-vegetation land to heal itself after being torn up by machines, according to Robert B. Whitaker, Public Affairs Officer for the Bureau in Arizona. President Nixon asked the Bureau and other public land administering agencies to adopt policies for regulating off-road vehicles, has begun hearing public comments throughout Arizona. Whitaker said that the general policy will be drawn up in Washington, D. C. to regulate all Bureau land---of which there are about 12.5 million acres in Arizona. Public comments will be used to determine both the categories for vehicular traffic and later to decide which areas in Arizona should be: restricted, open, or partially restricted from vehicular traffic. Currently, only the Aravaipa Canyon Primitive Area near Safford and the Paria Canyon Primitive Area southwest of Page are restricted from use by off-road vehicles by the Bureau. The problem of off-road vehicles destroying vegetation has grown more pressing in recent years, Whitaker said. Today, an estimated 100,000 off-road vehicles, including four-wheel drive automobiles and two-wheeled motorbikes are owned in Arizona alone, with an anticipated increase of 20 percent each year. That number has grown from about 25,000 off-road vehicles owned within this state 10 years ago. (Arizona Daily Star, March 15, 1973).



Drawings by Roberta Humphrey

BOB HUMPHREY IN BOOJUMLAND

Its real name is Idria columnaris Kellogg. The early Indians of Baja California called it milapa. And the Jesuit padres named it cirio because it tapers like a candle. But most people who see one in the wild today prefer to call it a bootum. Especially Robert R. Humphrey, Ph.D., emeritus professor of range management at the University of Arizona, and the author of the just published book, "The Boojum and Its Home", from UA Press.

"The boojum is by many standards one of the most unusual and even bizarre plants not

only in the western hemisphere, but of the world, "writes Humphrey who has been studying this woody species for more than 40 years. "Cirio suggests something call, straight and tapering while boojum suggests something weird, unpredictable,

and even frightening, a grotesque kind of monstrosity growing in far off dangerous lands. If Idria is a cirio, it is just as surely a boojum. It is probable that all little boojums begin life with chromosomal cirio instructions. Sooner or later, however, these directives are forgotten and the boojum takes over." I hoped, wrote Humphrey, that an in-depth study of this striking member of the plant kingdom and of the desert in which it grows might contribute to a real understanding and enjoyment of the species and the eco-systems of which it is a unique constitutent."

The boojum is not a cactus—it is a close cousin to the ocotillo. The short side branches which grow along the main trunk are very similar to those of the ocotillo. But the boojum does have a massive woody cylinder or skeleton similar to the saguaro which gives the plant strength and stability. From a layman's point of view the most striking parts of the book are the illustrations. His pictures show that, apparently, nothing is too outlandish for a boojum. They grow tall and unbranched, short and thick, prostrate to the ground, drooping to the ground, dichotomous and multi-branched, out of cracks in boulders, covered with lichens, and et cetera almost ad infinitum. Over the years, Humphrey has taken more than 1500 color slides plus uncounted black—and—white pictures of the boojum. His book is liberally sprinkled with the black—and—whites. For persons interested in the Desert, "The Boojum and Its Home" is both an authoritative and entertaining reference and field guide. It's a boojum hunter's bible.—————Quoted from Arizona Daily Star 4-28-74

SOME ECHOES FROM THE 1974 CACTUS SHOW OF TUCSON CACTUS & BOTANICAL SOCIETY



Lee Fuller and a Young Cactus Show Visitor admire a fine Old Man Cactus while Tom DeHaven supervises. (Photo by Arizona Daily Star).

A HUGE THANK YOU FROM BARBARA ROGERS

to those members who helped bring about a very successful seed and propagation section of our Cactus Show. Some members gave seeds; others helped to form the exhibit; others helped during the Show itself. Each member did his big share of work to produce a most successful show. Says Barbara: "My sincere thank you to all."

NEEDS SEEDS!!! Bring 1 pod! Bring 10 pods! Even 100 pods! But Bring! Bring 1 seed. Bring 1 cup of seeds Bring pounds of seeds. But bring. Seeds of cacti and the other succulents. Popular requests for seeds at the Cactus Show were for mammillaria, saguaro, stapelia, pereskia, boojum, Arizona rainbow, bishop's

seed are usable in packages of "Mixed seeds." WHO BRING SEEDS? All members of T.C.B.S. WHEN? To all cactus meetings. Or phone Barbara Rogers ----885-6485. WHY? Due to the tremendous demand of the public to buy cactus

seeds at our 1974 Cactus Show. Now Barbara Rogers and the Seeds Group are collecting seeds to sell at the 1975 Cactus Show.

THE LIBRARY OF THE TUCSON CACTUS & BOTANICAL SOCIETY is located at the Nancy Clarke Insurance Agency at 2754 North Campbell Avenue. It is free to all members. Many hundreds of dollars are invested in the excellent books, encyclopedias, magazines, and monograph files. New members especially, are urged to become acquainted with our library and to use it regularly and extensively to become well informed in the field of cactiand the other succulents. Most members of long standing use it all too slightly. (r).

IN MEMORIAM

French Anderson May 29, 1974

Founding member of Tucson Cactus &
Botanical Society
Public Relations Officer

Elsie Niehus March 1974

Actively interested cactophile

Mrs. H. Scott Thomas April 6, 1974

Wife of our active member, H. Scott Thomas

NEW MEMBERS OF T.C. & B.S. since the Membership Roster was published: James Bleg, 3740 Tronwood Hill Drive, Tucson 85705 Phone 743-0620. Mrs. Lis Greenberg, 1261 W. Wetmore Road, Tucson 85705 Phone 888-4044. B. E. Hilpert, 422 N. Sawtelle St., Tucson 85716 Phone 325-6895. Mrs. Beatrice C. Perez, 1415 W. St. Clair, Tucson 85705. Mrs. Rosella Riggins and Dennis, 3426 E. Bermuda St. Tucson 85716 Phone 325-8922. Mrs. Minnie Goodman, 4745 E. 10th St., Tucson 85711 Phone 327-0775. Mr. Claude Donndelinger, 1106 N. Camilla Blvd., Tucson 85716 Phone 325-5257. Mr. & Mrs. Reed Robinson, 4321 E. Coronado Drive, Tucson 85718 Phone 299-0248. Mrs. Iris Clifton, 25543 E. Florence Dr., Tucson 85718 Phone 795-0615. Mr. & Mrs. Philip Cheeseman, 1005 E. Grant Rd., Tucson 85719 Phone 882-0380. Mrs. Helen N. Bolton, 6146 E. 14th St., Tucson 85710 Phone 296-5128. Mrs. Sigmund Robbins, 4320 Placita Baja, Tucson 85718 Phone 299-2980. Mr. & Mrs. J. G. Gaston, 1750 South La Cholla 85713 Phone 623-4997. Mr. & Mrs. R. V. Bond, 2602 N. Tucson Blvd. 85716 Phone 325-4231. Mr. & Mrs. Earl Christensen, 1961 Khaibar Place 85704 Phone 297-2919.

NEW MEMBERS ARE URGENTLY INVITED to volunteer to work on the staff of our quarterly newsletter - CACTUS CAPITAL CHATTER. Can you write book reviews? Summarize articles from periodicals? Do you like research work at liraries? Clip suitable articles from newspapers? Can you type accurately and neatly? Do you draw, sketch, paint, design? Write to CACTUS CAPITAL CHATTER editor, Josephine Shelby, P.O. Box 375, Oracle, Arizona 85623.

MEMORIES OF CHERISHED FRIENDS IN TUCSON CACTUS & BOTANICAL SOCIETY:

Dana Sloan (Mrs. Hugh Sloan) sold her picturesque and historic home on Tumamoc Hill and moved into Armory Park Apartments, Apt. 806, at 220 E. 12th St. Her telephone number is 624-1027. She would enjoy visiting our meetings if a cactus friend would like to drive her to them. Dana and Hugh were faithful, long-time members.

Helen Bolton, another faithful, long-time member, has returned to her home in Tucson after a long absence. Christina Walker, Helen's stepmother, also a cactus member, is now unable to attend our meetings, due to health problems.

P.G. and Alta Nichols are charter members of our organization and intimate friends of Cactus John Haag with whom they worked to found Tucson Cactus Club in 1960. On June 9, they flew back to Little Falls, Minnesota to make their home with a son. We earnestly wish for them in their new home, the return of good health, and happiness and contentment. Their new address is Route 4 Box 34 B Little Falls, Minnesota 56345.

"Piney" and Alice Wanner were dedicated and hard-working members of T.C.B.S. for many years. Due to health problems, they have moved to California where Alice is in a nursing home and Piney is living with younger relatives. Alice was vice-president of our society in 1965. She and Piney are among those members who worked with pick and shovel and sweat to lay out Haag Memorial Garden which T.C.B.S. gave to Desert Museum.

H. Scott Thomas, a member of T.C.B.S. for many years, no longer drives a

car. He wants very much to attend our meetings which he can, if any of you will bring him in your car. He has donated mimeograph work whenever we needed such. He is now alone since the recent death of his wife.

ACTIVELY INTERESTED TCBS MEMBERS: Work hard at putting on a successful cactus shows. Grow fine plants to exhibit at competitive Garden Club Shows where they win awards. Work hard on specialized committees contributing to rapid, solid growth of the Society. Write articles about their personal plant-collecting field trips, for CACTUS CAPITAL CHATTER and for foreign publishers requesting reprints. Help in landscape beautification plans for their neighborhoods. ALL THIS AND MUCH MORE! READ ABOUT THESE MEMBERS IN THIS ISSUE! YOU CAN DO LIKEWISE!

MEET HARRISON YOCUM MEMBER OF TUCSON CACTUS & BOTANICAL SOCIETY

Harrison Yocum's serious interest in the study of plants began in his high school years when a Nature Study Club was organized. This interest led him to enter Pennsylvania State University to study horticulture and receive the B.S. degree. Then to Rutgers University from which he received the M. S. degree. He has taught horticulture at university, high school, and junior high school levels. He did research with pollen grains at the University of Arizona Geochronology Laboratory; with the Tree-Ring Laboratory; and was greenhouse technician with the Environmental Research Laboratory. On November 1, 1973, he became full time Superintendent of Landscaping at the Tucson International Airport. He remains on a consulting basis at the Environmental Research Laboratory. Present plans at the Airport call for the enlarging of the parking lot. Harrison hopes to beautify the cactus gardens which will be retained there.

His hobbies are varied. Plant collecting has built for him a collection of over 300 species of cacti, and over 300 species of palms. A visit to

his sister in Singapore last year netted him two sprouted coconut palms and several others to bring home. He is a rock hound enthralled by the great beauty of rocks to be used in cactus gardens. He has built a miniature rock mountains in his yard and planted cacti among the rocks. A West Australian cactus gardener, Frieda Long, read about this in a late issue of CACTUS CAPITAL CHATTER and wrote Harrison for instructions to build such. His photographic interest leads him to take slides of plants and scenery, with emphasis on cacti and other succulents; palms of the world; beautiful foliage plants world-wide; gorgeous flowers; botanical gardens of the U. S. and Singapore. He composes music. He collects books in the fields of botany and horticulture; minerals, rocks, and crystals; the Old West. He holds memberships in organizations relating to his numerous, varied interests. (r).

MEET "SHORTY" CLIFFORD OF TUCSON CACTUS & BOTANICAL SOCIETY

Ed ("Shorty") Clifford is a graduate of Michigan State University, 1922-B.S. in Forestry; 1929-M.S. in Forestry. He took courses there also in Landscape design and Planting Materials since he has had a life-long interest in beautifying his home with plantings of trees, shrubs and flowers. His professional experiences include: forester for telephone companies; city forester for Flint, Michigan; employee of U. S. Forest Service, as technical foreman in the Civilian Conservation Corps; planting assistant in charge of USFS nurseries growing trees for reforestation on National Forest and other forest lands; nursery superintendent of USFS nurseries in Minnesota, Wisconsin, Missouri, and Michigan. During his 31 years spent with the U. S. Forest Service, it has been estimated that he, in some way was involved in the growing of over 300,000,000 trees for reforestation. Most of these were pine and spruce. He had one tour of duty during World War II, raising the guayule plant for rubber substitute with, the USFS operating in Texas, California and Arizona. (r).

LILLIAN S. FISHER! OF T.C. & B.S. heads a conservation movement—SAVE THE BOOJUMS! She reports having problems in securing permits from the Mexican government to allow large boojums to leave Mexico. Instead, that government allows these rare trees to be uprooted and left to die in their Baja habitat, by native road-builders. Lillian is advising certain of the arboreta, universities, and various botanical gardens in California of the possibility of finally securing permits to import Idria columnaris, cirio, or boojum (whichever name one chooses). To be able to do this is to rescue and save them from dying by the wayside in Mexico.

MAY WATROUS, CHAIRMAN OF T.C.& B.S. EVENING PROGRAMS, has answered in detail a request from the new program chairman of Houston Cactus & Succulent Society. She asked for assistance in securing the speakers of our three successful evening programs, for programs for Houston's Society. Houston learned about this through CACTUS CAPITAL CHATTER which they read.

KAKTEEN SUKKULENTEN, a cactus journal of the German Democratic Republic, is being sent to us as a gift from our friend there, Gerhard Kaiser. We are pleased to get it, especially since our member, Hildegard Nase, has volunteered to translate many of the articles into English. She types these and inserts them into each edition for you TCBS readers of literature on cacti. For further information ask or write your Affiliate Director, Josephine Shelby, who says that Hildegard is thus making a fine contribution to educational facilities of Tucson Cactus & Botanical Society.

<u>C A C T U S</u> is a journal for amateurs in cacti and other succulents, published in Belgium for cactophiles in Belgium, France, Holland and Switzerland. Fred Lampo of Maldegem, Belgium, who corresponds with TCBS members, requested of CACTUS CAPITAL CHATTER reprint permission to use our article

illustrated with the author's photographs, "San Pedro Nolasco Island", by our member, William Pluemer. This appeared in C A C T U S, September-October, 1973, translated into French by Fred Lampo. Their acknowledgement in French reads: "Avec l'amable autorisation de 'CACTUS CAPITAL CHATTER', periodique de la Societe Cacteophile et Botanique de Tucson, vol. VIII, 1972, nr.3."

DOOR PRIZE FOR MAY: MAMMILLARIA GEMINISPINA: In astrology, those born in May are called Gemini. Therefore, it is appropriate that our May door prize is named Mammillaria geminispina. "Gemini" means twins or a pair, and "geminispina" means a pair of spines...in this case, the central ones which are arranged one above the other, with one pointing upward and the other pointing down. This is a pretty white-spined mam, and it comes from Mexico. It forms large clusters eventually and some beautiful clumps are in the Huntington Gardens at Pasadena, California. Those of you who attended the C.S.S.A. Convention there in 1969 undoubtedly remember these. The plant seems to be hardy in Tucson. It likes a rich soil and lots of water in the summer if it has good drainage. While semi-sun is acceptable, the spines grow heavier and longer in more sun. The flowers are white with a red midstripe. It is considered a shy bloomer for most growers, but flowers or not, it should be a source of pride to its lucky owner.---

DOOR PRIZE FOR JULY: LOBIVIA HUASCHA RUBRA

This species used to be known as Trichocereus hascha var. rubriflorus. Britton and Rose changed it to the Lobivias, because it is a day bloomer, while most Trichos flower at night, and also the flowers have shorter stems. It comes from Argentina and probably the name "huascha" designates an area there. The "rubra" part refers to the cherry-red flowers which are large and beautiful. The plant clumps at the base with pale green stems which grow 12" to 24" tall. The yellowish-brown spines are numerous and sharply needlelike--- just try picking one up, even with gloves! It thrives in full sun and likes lots of water and summer feedings. The species is hardy in Tucson and may be planted in the ground where it has a better chance to develop its full potential in growth and flowering.--Nancy Clarke.

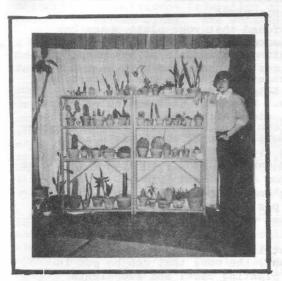
---Nancy Clarke

PERESKIA GRANDIFOLIA is a member of the tribe of cactus considered to be the nearest relative of other woody, flowering plants. Its versatility makes it a valuable landscape tool in the Tucson garden. Unlike other cactus, it thrives well in flower gardens which require very different conditions from those which one usually associates with cactus. exposure with a trellis support seems to be a favored location. June brings clusters of pink flowers resembling the wild rose. Then follows decorative fruit like small green apples. Shiny, green leaves cover the branches from March to frost time when the leaves drop, showing the long thorns and green branches. It thrives on severe pruning and can be trained to form an interesting pattern against a wall. If the winter is severe, protection should be provided for a year or two until the plant is well established. Pereskia Grandifolia is a native of Brazil and is often used as a windbreak or a fence there. In my garden, it grows on trellises to provide partial shade for the porch which is open to the east. In this situation both sides of the trellises are equally attractive. -- Helen Roubicek.

TUCSON CACTUS & BOTANICAL SOCIETY ANSWERS A REQUEST FROM ARIZONA DIRECTOR OF BUREAU OF LAND MANAGEMENT

Throughits member, Josephine Shelby, who represents TCBS on the state Advisory Commission on Arizona Environment, we received a request for our comment on an Environmental Statement concerning the Proposed El Sol to

Vail (Arizona) 345 kv Transmission Line. President Paul Henshaw determined that this request be honored. He assigned Carl Horst, Chairman of TCBS Legislative Committee, to prepare our comment. Carl Horst has a serious concern about the environment, and has qualifications both as an engineer and as a naturalist. (r).



Cliff Woodward of Glenshaw, Penn.
near Pittsburgh. He attends junior
high school; is fourteen years of
age; and is the youngest member of
T.C.B.S. In winter he keeps his
plants indoors on shelves in front
of large sliding glass doors that
lead into the den of his home.
Window sills are filled with small
flats in which he keeps his smaller
and more valuable plants. During
summer, he sets his plants outdoors on tables.

Cliff Woodward sent our Affiliate Director, Josephine Shelby, an inquiry about our organization, its program, and its activities. Our answer captured his interest. He writes us regularly about his endless activities with his plants, and his persistent search for authoritative information about his well loved plants. Cliff's grandmother's collection of small cactus plants fascinated him as an eleven year old boy. A nearby nursery and some mail-order dealers have helped him build his collection to 128 plants. They range in size from seedlings to an 18 inch Cephalocereus. He likes Opuntias because of their easy propagation and diversity. He admires the Cephalocereus cacti for their hair and fantastic shapes. He has Ferocactus and Echinocactus which he likes for their shape and spines. There are other favorites also. His cacti flourish except for one thing! -- BUGS! Cliff just usually removes them by hand, except in severe cases when he uses an oil-emulsion insecticide. He has received 9 bags of seeds from T.C.B.S. members, Georgia Fisher and Barbara Rogers. All these seeds he has already planted and reports that they are "doing beautifully". He grows his seeds by filling a plastic bag with sand and peat; wetting it; dropping in the seeds; then tying the bag shut. He enjoys corresponding with other cactophiles, as he is interested in the

opinions of other persons, he says. Some day he will visit Arizona and Tucson Cactus and Botanical Society—a most interesting venture helping him to learn a lot — he writes. He has requested a complete file of our CACTUS CAPITAL CHATTER which he will have bound, for an impressive addition to his book collection. Thank you very much Cliff, for such a compliment to our newsletter. (ed). He has plans to write several articles for CHATTER, on various subjects. He took seriously the editor's invitation and request that members do this.

Members, please look in our Scrapbook History for pictures of Cliff, his plants, and his house in Glenshaw, Penn. Cliff would be a fine addition to our Tucson membership. He would enliven and stimulate many of our members to accomplish much in growing cacti and studying plants continually, for more information. His letters are truly delightful to read; his pride and interest in his favorite plants, inspiring. CHATTER editor wishes to

prophesy that Cliff will become a second Luther Burbank -- another wizard of the plant world. His name and address are: Cliff Woodward 1805 Shaler Drive, Glenshaw, Penn. 15116. Maybe you would like to write to him. (r).

"FLAT PLANTING"

I'm sure at one time or another, you've found that your plant space has run out while there are still cacti and succulents left over. I've solved this problem to a certain degree by planting small flats of 5-8 plants each. They are easy to do and I get a certain amount of enjoyment out of seeing the fantastic results that are achieved. To make one, I start by getting a plastic flat about 8" long by 5-1/4" wide and 2-2-1/4" deep. These can be purchased at most nurseries. Most have drainage holes, but if yours doesn't, put in broken pottery, etc. After the drainage material is in the bottom, add your soil mix, (I can't really say what to use, since everybody has his/her favorite mix, although I prefer equal parts sand, potting soil and peat.) Spread this out evenly in the flat. It need not be moistened but if you want to, the top can be slightly sprayed with a fine mist of water.

Planting is simple: just dig a hole big enough to take the roots and pat dirt around plant once it is in. As to positioning the plants as they are planted, I put them in rows. For example, 8 plants - 2 rows of 4 each about 1 to 1-1/2 inches apart.

The best size for the cactus or succulent is anywhere between 1/2" tall to 3" tall. Obviously, the smaller the plant, the more that can be put in each flat. I have found this method of planting cacti and succulents a great space-saver and a good way of helping smaller plants grow and stay safe from accidents. I hope you try this and have good luck!

THE LOSING MINORITY REFUSES TO HIBERNATE INTO DORMANCY DURING DOG DAYS. By a too close vote of its members, T.C.B.S. voted to close shop during the 7th and 8th months of 1974. This allows merely 10 meetings per year. Subtract the purely social meeting December Xmas party and we are down to only 9 serious meetings per year. Cactus Grapevine rumours are that the ambitious and persistent minority of members plan to remain active during 1974 dog days. (f).

THE MAY MEETING OF T.C.B.S. led by Barbara Rogers, offered seed planting instruction. 50 glasses (size?) of seeds were planted. The leader was very busy helping everyone for one hour. Richard Wiedhopf showed his slides that demonstrate how to pollinate cactus blossoms in order to obtain seeds from indoor potted plants. (r).

THE JUNE MEETING OF THE TUCSON CACTUS & BOTANICAL SOCIETY featured the subject of cactus and other succulent propagation, excluding seeds. Various types and methods were explained by Alan Blackburn. Four grafted plants used in the demonstrations were given as door prizes at this meeting. (r).

THE JULY MEETING OF THE TUCSON CACTUS & BOTANICAL SOCIETY offered a slide presentation by Glenn Sanger who is an excellent Tucson amateur photographer. The first section of slides featured Arizona wildflowers, while the second presented Arizona cactus plants in bloom. (r).

MANABU SAITO is a Japanese-born nature artist whose home is in New York. Yearly in the Spring when the Southern Arizona Desert bursts into bloom, he visits here. He paints the Desert Landscape as well as individual Cactus Plants in bloom. His portfolio of the showy flowers of 8 native North American cacti was featured in AUDUBON. July 1973, Volume 75, Num-

ber 4. On May 15, 1974, he made a guest appearance on the Arizona Today television Channel 12 program. His Tucson host, Alan Blackburn, some of whose plants Manabu has painted, accompanied him and showed a number of these cacti.

HILDEGARD NASE was a runner-up for the Horticulture Sweepstakes in the April 20 and 21 Standard Flower Show presented in Tucson by the Southern District of the Arizona Federation of Garden Clubs, Inc. and the Old Pueblo Council of Garden Clubs. She entered 17 potted, named Cacti and Succulents. A silver award was won by Hildegard for prizes for 11 Firsts, 3 Seconds, 2 Thirds. The Special Award was a beautiful silver pitcher which had been donated by the Palos Verdes Garden Club of Tucson. See the club scrapbook for a photo of Hildegard with her many prizes and the Special Award.

SONIA BARKER, cactophile of Somerset, England, visited Blackburns on Cinco de Mayo.

SUNSET, The Magazine of Western Living, February 1974, pages 152-153, states that serious cactus gardeners might profit from the 14 years' experience Nancy Clarke of Tucson has had with growing cacti. In a 2-page spread of photos accompanying their report, "The cactus adventures of NANCY CLARKE", SUNSET discusses 1). her growing many cacti from seeds.

2). her 12' x 20' greenhouse which houses her large collection of cacti and other succulents. She is a member of Tucson Cactus & Botanical Society.

A NEW ABBEY GARDEN PRESS PUBLICATION: The Repertorium Succulentarum edited for the I.O.S. by Gordon Rowley of England and Len Newton of Ghana. This work is the single most valuable publication for the botanist and serious student of succulent plants. It is a complete annual listing of all new names, new descriptions, combinations, etc., of cacti and other succulent plants with full citations, an excellent and most useful reference. Volume 23 for 1972 (the current volume), consisting of 16 pages plus soft cover, is now available from ABBEY GARDEN PRESS for \$3.00. (r).

CLEARANCE SALE OF BACK VOLUMES OF CACTUS & SUCCULENT JOURNAL ABBEY GARDEN PRESS is clearing out its entire stock of these volumes. The following volumes, normally available for \$12.50, are now offered for \$9.50 each: 14, 16, 19, 20, 21, 22, 23, 24, 27, 28, 29, 35, 37. All thirteen volumes may be had for \$100.00. Other volumes will be offered in future journals. To order, write to: Abbey Garden Press, 1593 Las Canoas Rd., Santa Barbara, Calif. 93105. (r).

CACTUS & SUCCULENT NURSERY DIRECTORY. The Sunset Succulent Society's revised list of "commercial habitats"-- nurseries of interest to serious collectors and to those just beginning to develop a cactus and succulent collection-is now in print. Copies are available for a 50-cent contribution toward the postage and printing bill. The compiler and distributor is J. W. Higgins, 1166 Fiske Street, Pacific Palisades, Calif. 90272. (r).

EXPEDITION ACROSS THE HIGH SIERRA MADRE IN SONORA AND CHIHUAHUA, MEXICO TO FIND "HIDDEN BEAUTY" IN THE GORGE." Alfred B. Lau reports his experiences in finding the habitats of many plants he wanted to investigate. He concludes that "the lure of the area will pull us back some day for more discoveries." Read about this in CACTUS & SUCCULENT JOURNAL (U.S.) Vol.XLVI 1974 No. 3 pp. 131-134. (r).

THE WORLD'S FIRST ALOE CONGRESS. Aloes are to Africa what Cactuses are to the Americas: the outstanding flowering succulent of the Continent. The emphasis of ALOE 75, Monday 14th to Sunday 20th, 1975, Rhodesia's First International Succulent Congress, will be on the genus Aloe. Accordingly, although the Congress will pay attention to Euphorbias, Stapelias and other succulents, it will be primarily devoted to Aloes. The Congress

will be of interest to gardeners and collectors of rare species, as well as to professional botanists and horticulturists. Indeed, the aim is to attract a balanced cross-section of enthusiastic delegates, including all of those whose Souls will revel inthe wide open spaces of the endless veld. Rhodesia has some of Africa's most striking species of Aloes. The formal program will include lectures and demonstrations, slide shows, the Society's Annual Show, national photographic and art competitions, a banquet, an oxbraaivleis, visits to the greatest Aloe gardens in the world. Finally, a unique feature will be conducted photo-safaris to outstanding wild colonies of different species growing on their native veld. ALOE 75 is being organized by The Aloe, Cactus and Succulent Society of Rhodesia, Africa, P.O.Box 8314, Causeway, Salisbury. YOU ARE INVITED TO ATTEND. Your Affiliate Director has details. (r).

GERHARD KAISER OF WEISTROPP, G.D.R. has become a good friend of several T.C. & B. S. members through our active affiliate program with cactus societies and cactophiles world-wide. This is one of his delightfully expressive letters to Josephine Shelby, our Affiliate Director:

Gerhard Kaiser DDR-8251 Weistropp Kr. Meissen

Dorfplatz 7
German Democratic Republic
May 14, 1974

Dear Mrs. Shelby:

I must wait a long time for your letter, and I asked in my letter to Mr. Pluemer: what's the matter with Mrs. Shelby? Now I'm glad that I can read you are all right. I hope your living standard is again in order. We read in our newspapers about the crise. That's a bad thing for you. I wish you the best.
I'm happy if I can read that the "Kakteen/Sukkulenten" give you and your

friends such a pleasure. I think I can also send you the 1974 issue. Mrs. Nase and Mr. Deutschman can help you to translate the texts. What's the matter with Mrs. Nase? I asked her some questions, but she didn't answer. I'm waiting!

I hope your copy of ARIZONA HIGHWAYS comes again to me. Your first coppy is very interesting and I showed it to my friends! Our knowledge about your country is very small, and so is such a journal a good help to improve our knowledge.

You asked how I receive plants from U.S.A. It's very easy to answer. Put them in a box, write my address on the box and give it to the post office... and ready! But I don't know what necessary papers you must have to get out the plants of U.S.A. What orders has your gouvernment? I think Mr. Pluemer can help you. He wrote to me that he wants to send cacti to me, and Mr. Deutschman has offered to get the necessary papers for it to ship me the plants.

I change plants with friends in West Germany, in Switzerland, in Belgium, and never there were difficult. So I hope I can get your present too. Oh, it's wonderful to have such friends!

In my collection there are not only "north cacti". I have a lot of Mamillarias from the south districts of Mexico, and Lobivien, Echinopsis, Rebutia and others from South America.

In the moment I have the best time with my plants. A lot of them is in flower, other have buds. I think it'll be a good year for me and my camera! But I'm so angry! There is a Toumoya and a Neobessya. I hope from year to year that I can have a look at the blossoms! No, 1974 it isn't again possible. Why not? I'm doing my best. They have sun and warmth, and I let them, dry, dry, dry! But nothing. It's a pit! What's with the "CCC"? You wrote you are mailing them to me regulary. But I got her last

copy in January: No.4/1973. Where are the others? I hope they'll arive me, and that the post office didn't lost them. Now I want to end my letter. Please take my best greetings for you and our friends. I hope they are all very well. What's the matter with Mr. Bricks? I didn't got news about him.

Sincerely your

HATTER

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY Affiliate of Cactus and Succulent Society of America, Inc. Subscriptions: \$1.00 -- U.S.A. \$1.50 -- Foreign

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

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A DEDICATION

Two charter members of Tucson Cactus & Botanical Society, Lura Fuller and Lena Marvin, have constantly and devotedly worked for the progress of our organization for fourteen years---ever since its founding. As Assistant Editors of CACTUS CAPITAL CHATTER since 1967, they have most efficiently handled its local mailings. For several years as the Hospitality Committee, they greeted our visitors and new members at the door. The Membership Committee was their work one year. have helped at all of our Cactus Shows and in serving refreshments after meetings.

LENA MARVIN LURA FULLER AND

The Editor of CACTUS CAPITAL CHATTER believes that Lura Fuller and Lena Marvin richly deserve our recognition of their loyalty and our heartfelt gratitude for their fourteen years of willing and dependable service. Therefore, the Editor proudly dedicates this issue of CACTUS CAPITAL LURA FULLER and LENA MARVIN.

A Message from the Founding President of the Tucson Cactus Club It certainly is a pleasure to see the growth made by the Tucson Cactus and Botanical Society. Those of us who met at Cactus John Haag's house, November 1960, for the first meeting, believed there was a place for an organization to provide for the sharing of interest in cactus, but I don't believe anyone foresaw the success that has been attained over the years. Certainly most of the credit belongs to the dedicated people who have carried on over the years. I would like to express my congratulations to them and the active members in the present organization who are maintaining a vigorous cactus society.

Dr. W. G. McGinnies Founding President of Tucson Cactus Club.

OUR ANNIVERSARY THE 14TH

Fourteen years ago in November, 1960 the "Tucson Cactus Club" was founded by "Cactus John" Haag assisted by his good friend, P. G. Nichols. John gave in every way that he could, to make it a successful group. He is well remembered for his dedication to seeing that the Saguaro Forests of Arizona would never die. He gathered saguaro seeds every year. He planted them himself and passed seed packets out wherever he went. When he attended the annual meeting of the Cactus and Succulent Society of America in 1962 in Los Angeles, California, he gave packets of saguaro seeds to all members present. Each packet was stamped "Tucson Cactus Club". He gave a saguaro as a door prize and shipped it from Tucson to the winner. During late 1962, John died. In 1965, the Club, newly named the Tucson Cactus and Botanical Society, memorialized him by planting the Haag Memorial Garden at the Arizona-Sonora Desert Museum in Tucson. Arizona.

"Cactus Workshop"

If cactus is your hobby And you want to learn the game, Attend Alan Blackburn's "Workshop" And you'll never be the same.

He doesn't fool with the A,B,C's, Nor with arithmetic, or any other lines. But he sure is a sticker With the dog-gone cactus spines.

We were there, we should know; He really puts on quite a show. With questions he sets your mond afore; That's why

We aspire To inspire Before we expire:

JFB

1975 MEMBERSHIP DUES ARE NOW DUE

NOTE CHANGES IN DUES. There are no more Family memberships, only individual ones costing \$3.50 per adult individual; \$2.50 per student individual under age 18. 1975 dues are NOW due and payable to the Treasurer -- Mrs. Lois Clarke, 3315 Treat Circle, Tucson 85716. Pay now and NO later than 12-31-74. Make checks payable to TUCSON CACTUS AND BOTANICAL SOCIETY. No dues paid -- no Chatter sent to you. No dues paid -- you cannot vote in business meetings.

THESE BOOKS can be obtained from U.A. Press Books, P.O.Box 3398, Tucson, Az.85722. Cacti of Arizona, Lyman Benson. Landscaping with Native Arizona Plants, Soil Conservation Society of America, Arizona Chapter. Arizona's Natural Environment, Charles H. Lowe. The Boojum and Its Home, Robert R. Humphrey. The Intimate Desert, Walter Collins O'Kane. A Light-Hearted Look at the Desert, Chuck Waggin.

SOME CACTI AND THEIR CULTURE

HAMATOCACTUS SETISPINUS should have a spot in every Tucson garden. It is very well suited to our climate, summer and winter, doing well in full sun or in partial shade. Its large yellow flowers with red throats appear off and on from June through September. For those interested in growing this cactus from seed, it germinates well, and blooms in its third or fourth year. If pot culture is your interest, either from choice or lack of outdoor space, Hamatocactus setispinus is an excellent choice. Its growth habit is much like mammillarias and coryphanthas. However, it does not clump readily. TRY GROWING HAMATOCACTUS SETISPINUS. You will be glad that you did. --Helen Roubicek of T.C.B.S.

TRICHOCEREUS PACHANOI

This Trichocereus is not as well-known and common in collections as some of the others. It is native to Ecuador and Peru. The bright green stems are nearly spineless, which should make it especially appealing to families with children and dogs. According to Borg, it can grow 20' tall. It is hardy in Tucson, but it is advisable to plant it in a protected spot. Otherwise, a cold winter may freeze back the tips and cause disfigurement. Like other Trichocereus, it branches from the base. The flowers are large, white scented, and appear at night near the top of the stem. The flower tubes are hairy on the outside and this is where it gets the genus name, as "tricho" is from a Greek word meaning "hair". Culture is easy--full sun and generous watering. -- Nancy Clarke, of T.C.B.S.

CACTUS PATCH LANDSCAPING Edna Zeavin of T.C.B.S.

With the scarcity and expense of water in Arizona, landscaping with cacti is a natural. Larry Doolittle of the Cactus Patch recommends the following ideas to assist each of us in beginning our own landscaping.

He believes the homeowner often neglects to group plants with those that complement each other. A look at the desert around us gives an idea in that direction. Saguaros can be grouped with prickly pears with the flat shape of the prickly pear complementing the stark, columnar shape of the saguaro. Silver chollas go well with Joshua trees or yuccas, and the claret cup hedgehog can be used in the Joshua-yucca grouping.

Besides grouping various cacti with their complements, the homeowner would be wise to consider the potential size of any plant. Naturalness can be achieved by using colorful rocks, and weathered wood, such as ironwood. Maybe a creosote bush or acacia could be combined with the cactus to create a more authentic desert setting.

Instead of a flat elevation, the real desert landscaper contours a mound of dirt (a berm) and uses the raised elevation as a showcase for his plants. Larry believes that cactus grow better in the ground than in a pot - any potential frost damage can be prevented by planting under trees for protection, or wrapping the plants with brown grocery bags, cups over tips, blankets or sheets.

Remember to heed his main tips - group cacti with complementary plants, don't forget potential size of plant, and try to achieve a natural desert setting.

MAMMILLARIA MADNESS Part I William A. Pluemer

Readers of the CACTUS & SUCCULENT JOURNAL are familiar with the "Mexico Logbook" series authored by Charles Glass and Bob Foster. These excellent and informative articles have always stimulated my interest in finding certain plants that might be considered collector's items due to their limited range or scarcity. When their "Mexico Logbook" Part II (C&S JI May-June 1970) discussed Mammillaria moelleriana, this plant became our number one priority for a trip to Zacatecas, Mexico in February this year. Via Mazatlan and Durango, Mexico, Zacatecas is about 1200 miles from Tucson.

My companion on this trip was ardent cactophile and good neighbor, Dr. Frank Ludwig. Driving south from Zacatecas, we left Route 54 and turned west toward Jerez. This busy town impressed us with its air of prosperity and vitality; not to mention an occasional colorfully dressed senorita. Experience has taught us that driving into a strange Mexican town is easy. Trying to find the correct route out is a horse of a different color, especially if you are short on conversational Spanish. Where, oh where, was the road to Rancho San Juan? Our quandry deepened as we twisted and turned through back alleys, yards and arroyos. Following a set of tracks heading in the direction the "road" ran out, and so did we -- into orchards, farms and plowed fields.

The mountains loomed large on the skyline, but always seemed to keep their distance. They were not about to give up their treasures easily. But high-spirited cactophiles are driven by mystic powers beyond the comprehension of mountains or ordinary layment. Hunkering down, we bounced through the countryside making our own road.

The Blazer's air suspension system had been fully tested when a village appeared and visions of thousands of Mammillaria moelleriana once again danced before our eyes. Stopping by a field, I accosted a young man with a query as to the name of the village. "Why, Sir - this is Rancho San Juan, and may I ask for whom you are looking?" This Peply in English was our introduction to Felix, who was put on our payroll without further ado. Flipping open the C&S Journal we explained to Felix we were looking for the plant shown therein, known to grow high in the mountains behind San Juan. Our altimeter had long ago settled at the 7500 foot mark in the flat farmland, so ascending from that elevation would be strenous.

Felix allowed he would introduce us to a local gentleman who "had more English" and could better assist in our request. Thus we met Senor Agapito Fernandez, US citizen, who seemed to hold a commanding influence over the then assembled and curious villagers. Sr. Fernandez told us he spent six months of the year in San Juan and the other six months in Indio, California. He had just finished a most attractive house in San Juan, of which he was justly proud. However, no one recognized the plant, but all were in accord that bisnagas were plentiful. Unfortunately, we were not in the candy business. Sr. Fernandez recommended that we proceed to Rio Florida, also known as "The Ranchito", about 4 miles distant. Felix had us pull up about midway as he said there were plants in the uncultivated portions of the fields along the road. After negotiating several stone walls, we collected a few of the largest mams I have seen. Some of the crusty and calloused ancients appeared from a distance as small barrel cacti. We believe them to be Mammillaria wagneriana.

Rio Florida is about the end of the road. Our pulses picked up a beat or two as we noted the "proximity" of a beautiful, steep gorge terminating in the pine and oak far above the village. But, first things first.

Another local gentlemen was assigned to take us to a location near the village where plants were growing. Walking through several cultivated fields, we instinctively knew this trip would be a lost cause, but we dared not affront our new host with an arbitrary dismissal. About a mile out we found a virgin field studded with giant opuntia, under which were many more mams of the type we collected down the road. Making a show of interest

we found a virgin field studded with giant opuntia, under which were many more mams of the type we collected down the road. Making a show of interes we dug a few seedlings and told Felix we wished to return to Rio Florida. All the while our eyes were drawn to the magnificent gorge. Our two mile walk was to be but a warmup for the final ascent.

Back at the village square there appeared a young man by the name of Pasquale, jauntily sporting a new red baseball cap. Pasquale was to take us up the gorge, with Felix along as interpreter. The whole village now knew our mission and looked upon us as truly lost souls; either completely mad or by very chance, poised on the threshold of a great botanic discovery. We preferred to promote a touch of madness as it automatically shut off a lot of time consuming questions that had Felix's head turning as though following a tennis match. Pasquale added his own necessities to our supplies, in the form of three bottles of warm beer, two of warm soda, some cookies and his .22 rifle. He slung the rifle over his shoulder, the

The pace was brisk, the incline steep. We soon found we were no match for the youths, who strode along in their open sandals unmindful and unhindered by sharp rocks, thorns and whatever else causes discomfort even in the finest Alpine hiking boots. It became necessary for us to call a stop about every 20 minutes as we were easily winded by the steep climb at such high altitude. Finally, after an hour and a half, the first pines appeared on the trail and with them the first plants. A heavy population of single

refreshments went into a large horse feed bag which we hoped to fill with

plants, each cupped in a clump of moss, coexisting with its host on a rugged, exposed mountain slope.

Could they be Mammillaria moelleriana? Frantic digging and quick examination revealed otherwise. Stenocacti. Samples went into the bag. Then appeared a heavy long-spined Mammillaria which we sampled as a consolation prize. It is possible this plant is the variety tortuospina of M. wagneriana, collected in the valley below. Our spirits began to fall. Pasquale motioned toward yet another far rise and once again we struggled up the trail. The

heavy long-spined Mammillaria which we sampled as a consolation prize. It is possible this plant is the variety tortuospina of M. wagneriana, collected in the valley below. Our spirits began to fall. Pasquale motioned toward yet another far rise and once again we struggled up the trail. The large bag and now empty bottles were left behind as trail markers. Another 30 minutes of climbing had me believing the villagers were correct in their first assessment of us. Beyond a crest we broke into a high meadow where Pasquale had seen "yellow peyote". The ground was dry and hard, but after a lengthly knee-crawling search, several dessicated plants were found; dry almost beyond recognition. Echinocereus Weinbergii. Here was small satisfaction, but our dismay over missing M. moelleriana was now running deep.

The high meadow gave up nothing else, so we began the most welcome descent. At one point on the narrow ledge-hugging trail, Pasquale stopped abruptly. Muttering a good Spanish oath, he unslung his .22 and quickly dispatched an 8-rattle diamondback. His uncovered foot was within striking distance when he saw the reptile on the trail. Felix, close behind, was visibly shaken. Buff, tan, with yellow underbelly and cocoa colored diamonds, it was one of

shot had left the skin undamaged and I now wish I had skinned it out and brought it Who says cactus collectors are mad? To prove my own machismo, after suitable intermission, I hoisted the heavy plant-laden bag on my back and started down the trail. The valley spread before us as far as the eve could see. Lakes, villages, fields, clusters of trees along the riverbed, all held in a timeless setting under the deep blue sky. and there a lonesome cotton cloud chased the gentle breeze. My reverie came to an humilating end when the bag slipped and I heard the breaking of empty bottles. Oh, the ignominy of middle age: cares were now for the plants. Had not Pasquale put the bottles in the bag, I certainly would have left them on the Perhaps they would bring him a few centavos. Well, poor Pasquale! No turn-Felix then suggested ins now. he carry the bag. This seemed

PASQUALE AND FELIX LEADING US TO THE HIGH MEADOWS.

more than reasonable. Taking a piece of leather thong he twisted and secured the top. With one small flick, he had the bag on top of his head where it rode in majesty for the next hour, - the broken bottles occasionally tinkling like the bells of some far off Buddhist temple.

the most magnificent reptiles I have seen. Pasquale's head-

To Pasquale went 50 pesos, which he immediately invested in more warm beer. To us, the disappointment of not getting our plant after 5 grueling hours in the mountains. To Felix, the joy of riding in the jump-seat of the Blazer, looking down with regal mien upon the gathered villagers as we left Rio Florida in a cloud of dust. In San Juan, after some cold beer, Felix received his tip in US dollars, as he wanted to take his wife to Los Angeles "without papers". Although we did our best to discourage this particular method, he remained adamant. Soaked through with sweat, encrusted in dust, and bone tired, we politely refused his invitation to dinner, and left for Zacatecas where a shower would be more welcome than food. Felix had given us exit directions and we cruised into Jerez in 15 minutes flat, noting where we had taken a wrong turn so long ago that same morning. (To be continued).

DR. ARTHUR C. GIBSON OF THE UNIVERSITY OF ARIZONA HAS STRONG INTERESTS
IN DESERT PLANTS AND CACTI

Arthur C. Gibson was born on October 16, 1947 in the Bronx, New York, but received most of his schooling in Ohio. From 1965-1969 he attended Miami University in Oxford, Ohio, where he graduated with honors with a B.A. degree in Botany. The summer before his senior year, Gibson was awarded a Mercer Fellowship from Harvard University to serve as a botanical collector and an herbarium assistant at the Arnold Arboretum in Jamaica Plain, Massachusetts, a post which he also filled the following summer. Through this experience Gibson was able to study thousands of species which were new to him, and he became particularly interested in the meaning of morphological diversity of plants. This interest was increased when he attended graduate school at Rancho Santa Ana Botanic Garden in Claremont, California, where enthusiasm for the subject was improved by a stimulating academic atmosphere. Gibson received a Ph. D. in Botany from Claremont University Center in 1973.

The dissertation for the Ph. D. degree described the evolution of woods in Cactoideae, the largest subfamily of cacti, which includes such organisms as saguaro and mammillarias. One finds a startling diversity of structures in these woods, not appreciated to date by botanists, and a range of features found in no other extant family. An attempt was made to outline the lines of specialization in these woods and to propose reasons for the diversity. Actually the study was intended to elucidate the meaning of variation in woods in general, but the topic naturally also developed as a story on the evolution of cacti specifically. Because of his strong interests in desert plants and cacti, Dr. Gibson was hired by the University of Arizona in August, 1972 as an assistant professor of plant anatomy to continue his research on these subjects.

Professor Gibson has continued his research on cacti and other succulents. Some interesting data have been uncovered which show more convincingly the relationships of Cactaceae within the centrospermous families and within dicotyledons as a whole. His comparative data may help to rearrange natural groups and phylogenetic lines within Cactaceae. Moreover, the evidence from studies of xylem and other features of the plant strongly shows that Cereus should not be used as a generic name for the cereoid cacti of sw United States and Mexico, supporting a feeling collectors have had for many years.

In pursuit of his research interests, Dr. Gibson has collected extensively in the Southwestern United States and throughout Mexico. In addition, he travelled to Argentina, Peru, and Brazil for a month during the last academic year for a project on Opuntia woods and a study of Maihuenia. Professor Gibson does not plan to spend his whole life studying just cacti, because he is interested in the origin of succulence in all groups and of many xeromorphic adaptations of plants. He wants to know from where desert plants have come, how they have evolved, and what factors have directly influenced their evolution through natural selection. Dr. Gibson also considers himself an enthusiastic plant geographer.

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OLEO: COTTAGE CHEESE: ICE CREAM! DELICATESSEN FOODS: These come in usable plastic pots, cups, containers- whatever. Cactus members use these for potting their plants. Please save ALL of yours. Bring them to meetings, and see Nancy Clarke about this.

TCBS MEMBERS MEET OUR CACTUS FRIENDS IN JAPAN AND BELGIUM

A large WELCOME sign, posted at the entrance to beautiful Ritsurin Park in Takamatsu, Japan, built over 300 years ago for a ruling feudal lord of Japan, introduced Osamu Ono* to me and my three American friends. We were sight-seers that lovely June day in Ritsurin Park. Two of us were members of TUCSON CACTUS & BOTAN-ICAL SOCIETY: Velda Plym and myself. Mr. Ono bought food so that we could feed the enormous multicolored fish swimming under a graceful, curved bridge. He gave us a royal tour of the Park.

Many Tucson Cactus Clubbers remember Osamu Ono from Takamatsu, Japan.
He once visited Tucson cactus country and was the guest of Jack and Isabelle Meyer, former TCBS members. We all learned of Osamu's enthusiasm tor growing cacti. With this in mind, through our Affiliate Director, Josephine Shelby,



William Pluemer gathered many of his choice cactus seeds which Josephine cleaned, carefully packaged and labelled. Then she appointed ME emissary from TCBS to deliver this gift of seeds to Osamu Ono "in person", and to carry to him the friendly greetings of the membership of Tucson Cactus & Botanical Society. It goes without saying that the recipient was most pleased. The only sad note to this story is that Mr. Ono had recently lost his home by fire. His regret was that he could not invite the four of us to his home. Our gift of seeds was not compensation for his serious loss, but, indeed it was something fine for his future garden.

* See CACTUS CAPITAL CHATTER Vol. I No.3 1965 for a biographical sketch of Osamu Ono, our cactophile friend of Kagawa, Nippon. (r).

william Pluemer, our member, and his wife, Judith arrived in Brussels, Belgium on the evening of September 11, 1974, during their recent trip to Europe. They arranged a dinner date there with Mr. and Mrs. Fred Lampo of Maldegem, Belgium, who are friends of members of TCBS. Fred has admired William Pluemer's excellent articles about Baja and Mexico, published in CACTUS CAPITAL CHATTER which he receives. He has published one of them and has plans for others. As a result of corresponding concerning this publishing, they have become friends which this very pleasant meeting in Brussels proved.

CENTRAL ARIZONA CSS MEMBERS visited several of their Tucson friends on September 29. Helen Roubicek's home landscaping in cacti and her growing methods had great appeal for them. Two Tucson cactus nurserymen, George Scannell of Tanque Verde Greenhouses, and Louie Fodor of Green Hand Nursery, gave them the grand tour courtesy. End of their trail was a stop at Open Gate Ranch where they inspected Alan Blackburn's lath house and received tips on cactus-growing.

DR. R. R. HUMPHREY AND TOURISM IN BAJA

The Scripps Institute Center for Marine Affairs, University of California, San Diego, asked Dr. R. R. Humphrey to participate in a 3-day workshop held in La Jolla, California, November 4-6, 1974. The topic of his talk was TOURISM'S IMPACT AND MANAGEMENT IN NATURAL AREAS OF BAJA CALIFORNIA. The objective of the Workshop was to develop plans for controlling or at least reducing the impact of tourism on the plants, animals, historical sites, geological features, etc., of the peninsula. The completion of the paved highway in Baja, from the California border to La Paz, Baja California, makes this objective a critical and timely one at this time. Dr. Humphrey gave the group a pictorial and verbal account of some of the more interesting features of Central Baja, winding up with a series of recommendations on needed protective legislation and enforcement. Dr. Humphrey was called to Central America prior to November 4 when this workshop started.

T.C.B.S. MEMBERS COMMENT ON R.R.HUMPHREY'S BOOK "THE BOOJUM AND ITS HOME".

THE BOOJUM AND ITS HOME

Robert R. Humphrey, author of "The Boojum and Its Home", a new book published in 1974 by the University of Arizona Press, is Professor Emeritus of Watershed Management and Professor of Biological Sciences at the U. of A. His intensive field observation and in-depth study of the weird-looking boojum tree or cirio (Idria columnaris) in its native Baja California Peninsula makes fascinating reading for any one interested in the North American deserts of our universe.

To quote the author "Probably no other desert area in the world is as interestingly different as this one. The great variety of plants, large and small, that occur nowhere else, and thus that are seen for the first time by the traveler to Baja California, lend an other-world atmosphere to the landscape. On our first visit to this desert, we had the feeling of being in a kind of Alice-in-Wonderland country, a feeling that still persists several years and many exposures later."

To the Jesuit padres, the boojum tree suggested a cirio or taper, the slender altar candle used in religious ceremonies. The term "boojum", however, was first applied in 1922 by Godfrey Sykes of the Desert Botanical Laboratory in Tucson. Although the pure cirio form is straight, gradually tapering, and tall - up to 70 feet -, many of these plants can be described properly as contorted or grotesque, apparently due to differences in factors of exposure, wind, soil, and rainfall. Most boojums are many hundreds of years old, and the seedlings are apt to grow in proximity to the shade of established plants.

The book includes about 100 black and white illustrations of the boojum tree and selected associates as agave, ocotillo, yucca, and elephant tree. It describes in great detail the climate and soil of Baja, California, with many references to the findings of other explorers and students. The volume ends with several appendices, including one listing the scientific as well as common names of plants referred to in the text. Some of these are too technical for the lay reader, but the average reader can scan the detailed portions of the text, and still understand and enjoy the fascination of the boojum tree and Baja California. $------Ruth \ Dougherty$

Edward D. Clifford. Being a forester and a rather late newcomer to the desert, I have been very much interested in the plants of the desert. I have seen a few boojum trees and heard some talks on them. I was very much interested in reading "The Boojum and Its Home", by R. R. Humphrey. In reviewing the book, I was concerned with the completeness with which the subject was covered, the arrangement of the information, and its appearl to the layman. The author has apparently covered all the factors that influence or might have an influence on the life and development. opment of the boojum. The book is technical, and the layman could find it dull reading. The discussion of each factor, soil, slope, temperature, etc. for each area separately made for much repetition. It keeps the reader busy referring to maps to locate the area being discussed. A short summary in non-technical language, giving the important facts about the boojum and its home would be of interest to all readers. The treatment of the selected associates of boojum is very good, easy to read, and gives good information on these associates. The book did stimulate an interest in visiting some of the homes of the boojum. Also, the next time that we see a boojum we will be better able to appreciate it and understand its many strange characteristics. The author is to be congratulated for the many years of hard work under difficult conditions that were required to obtain the information about THE BOOJUM AND ITS HOME.

Lillian S. Fisher. I just thought I would drop you a note to tell you how much I enjoyed "The Boojum and Its Home". The copy I bought I have already given away, and I plan to buy another copy. Of course, you know, the boojum tree is one of my very special and favorite plants, and I am happy to see that at last an authoritative work on it has been published.

Betty Blackburn. I really enjoyed the book even though it contained many statistics that were needed. A lay person could enjoy this book in spite of the statistics. It is a very complete and authoritative book.

<u>Julie Porter</u>. I enjoyed reading most of this book. I fell in love with the ocotillos when I arrived in Arizona and made a small effort to learn about Fouquieria splendens. Hence, I found Dr. Humphrey's book about the unique boojum most interesting and valuable.

Florence A. DeHaven. This is a most interesting, educational and comprehensive reference book, not only on the Boojum but also other plants of the Central Desert of Baja and a restrictive area of Sonora. It stimulates a desire for a personal contact with this area. I particularly enjoyed the chapters on Selected Associates of the Boojum; also the detailed Appendix.

Tom DeHaven. I did a "quick reading" type of summary of the book just before I entered the hospital. I enjoyed it immensely. It is well written and has that rare combination of good narration and scientific analysis. It should be in every cactophile's library. Personally, I believe that the photographic illustrations and the charts, alone, are sufficient reason to get the book for reference.

Lura Fuller. Since reading this book about the boojum, I feel that I can grow a boojum with more success than I have in the past.

Lena Marvin. I enjoyed this book all the more as I had a trip to parts of Baja mentioned here. Since I am a rock-hound, I especially enjoyed the descriptions of geological nature.

ANNUAL REPORT 1974 CACTUS CAPITAL CHATTER NEWSLETTER OF

Tucson Cactus & Botanical Society

4 quarterly issues were published. 3rd and 4th issues were enlarged to $12\ pages$.

All paid-up members of TCBS received CHATTER free, by mail -- to Tucson and Green Valley addresses.

Paid subscriptions were mailed to 13 individuals in Ghana, Africa; Somerset, England; Belgium; Arizona, Iowa, California, Texas, North Dakota, Florida

Complimentary foreign mailings went to: German Democratic Republic;
New South Wales and West Australia; Japan, Czechoslovakia.

CHATTER was mailed to the following on an <u>exchange basis</u> for their publications: San Diego, Calif. CSS; Los Angeles, Calif. CSS: Houston, Texas CSS; Colorado CSS; Henry Shaw CS, St. Louis, Missouri; Gates CSS, Riverside, Calif.; Cactus and Succulent Information Exchange, British Columbia, Canada; New Zealand -- 3 societies.

Complimentary copies were mailed to: Editor of Cactus & Succulent Journal of CSSA. National Affiliate Chairman of CSSA.

Complimentary copies were mailed to the following Arizona addresses:

- 1. Curator of Plants at Arizona-Sonora Desert Museum in Tucson.
- 2. Desert Botanical Garden in Papago Park in Phoenix.
- The University of Arizona: The Library. The Herbarium. Boyce Thompson Arboretum at Superior.
- 4. Tucson Public Libraries: Central, Valencia, Wilmot, Woods Memorial.

THE OCTOBER MEETING - PLANT AUCTION SALE seemed to be a big success. At least there was much bidding and there were quantities of plants. Many visitors attended and several new members signed up. \$118.00

was the net profit.
Contributors to CHATTER 1974 included TCBS members, U of A and ASU faculty members, free lance writers, and a cactophile in German Democratic Republic.

Respectfully submitted by Editor, CACTUS CAPITAL CHATTER

Josephine Shelby

T.C.B.S. HAS PURCHASED A SOUND SYSTEM. On May 20, 1974, T.C.B.S. purchased an Amplivox Sound System Model 112 with a Model S - 2090 Microphone, from Roh's, Inc. of Tucson. This is a transistorized "solid state" system operating entirely on dry batteries. Therefore it can be operated indoors OR outdoors, with no electric cords attached. The microphone was especially picked as being small-sized and light weight. This allows it to be used normally on its flexible holder or removed and used by holding it by hand or attached to a neck holder. This allows a lecturer to use his hands while talking. This sound system is very portable and can be used on field trips if desired. The cost was \$219.95 plus \$10.50 tax, totalling \$230.45. This included the batteries, making it complete and ready to operate. Such a sound system will help many of our hard-of hearing members enjoy the meetings. Also, it will overcome the defective acoustics in the meeting room. --Tom De Haven.

ORGAN PIPE CACTUS NATIONAL MONUMENT

Near Arizona's rendezvous with California and Mexico, there is a World of Space and Color. Its horizons appear held apart by sky; its mountains look flatly two-dimensional; and its spectacular vegetation seems borrowed from another planet. Reaching northward from the wilderness of northwestern Sonora, Mexico, a sub-tropical finger of the Mexican gulf coast desert extends from the Gulf of California into a broad, mountain-fringed valley of southwestern Arizona. Accompanying a relatively frost-free climate, this vegetative probe meets the eastern edge of the California microphyll desert and the western rim of the Arizona succulent desert.

Here, within 516 square miles of Organ Pipe Cactus National Monument, plants and animals of the three phases of the Great Sonoran Desert merge to form rich and varied biological communities. This scenic wilderness of rugged mountains, cactus-studded slopes and desert flats, is an American heritage preserved for the enjoyment of the people. Only in the Sonoyta Valley -- a broad lowland stretching northeastward from the Sea of Cortez into Arizona -- do a few species of Mexican plants typical of this area cross the international boundary. Among them are: the pudgy elephanttree, Mexican nettlespurge, the rare senita, huge clumps of the spectacular organpipe cactus. In the Monument, California microphyll desert dominates the area west of the Growler Mountains and the Quitobaquito: Hills. Creosotebush and bur-sage provide up to 80% of the plant population. groves of tall, stiff-branched ocotillo and the leafless holacantha (crucifixion-thorn) add variety to the scene. Within sandy washes are seen the graceful and plumelike crowns of smokethorn. Among its neighbors are mescat acacia; rattail cholla; sangre-de-drago (blood of the dragon); Coville creosotebush which the late Dr. Forrest Shreve found might live for more than 100 years. Tesota (desert ironwood) grows to a 30 foot height and has evergreen leaves that are browsed by bighorn mountain sheep; rodents devour its nutritious seeds. Senita cactus is one of the spectacular plants of the Sonoran Desert gulf coast. It clumps with 50 or more stems and rarely exceeds 10 feet in height. Its small pale pink flowers open at night in May and June. The Arizona Succulent Desert thrives on the upper sloping bajadas and in the foothills. Here are found leafsucculents -- the agaves and the yuccas. The stem-succulents are the most abundant. Among these are the famous organiipe cacti, the saguaro, the chollas, the pricklypears, bisnaga, fishhook, pincushion, and hedgehog cacti. Nonsucculent trees and shrubs compete with the succulents; ocotillos, foothill and blue paloverdes, jojoba, jumping-bean sapium, ephedra, fairy duster, bursera (elephant tree). Root succulents develop greatly enlarged roots to serve as underground reservoirs, weighing from 5 to 80 pounds. Reina-de-la-noche (queen of the night) nightblooming cereus is a root succulent growing in this Monument.

A free, hiking and mountaineering guide to Organ Pipe Cactus National Monument may be obtained by writing the Monument, Box 38, Ajo, Arizona 85321.

ORGAN PIPE CACTUS NATIONAL MONUMENT/ARIZONA Natural History Handbook Series No. 6 may be purchased from the Superintendent of Documents, Washington, D.C. 20402. Price 45 cents. The months of April, May, June, July are especially favorite times to visit here -- the cactus-flowering periods. Wildflowers bloom during February, March, April, May, June. Natural conditions influence blooming. Each species varies from year to year. .. Excerpted from "Organ Pipe Cactus National Monument/Arizona."

Natt N. Dodge.