	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		
	VOLUME X	1974	NO. 2
	EDITOR FOR BAJA AND MEXICO William Pluemer GENERAL NEWS REPORTER Betty Blackburn CIRCULATION Lura Fuller	EDITOR Josephine Shelby CONTRIBUTORS Edna Zeavin William Pluemer Paul Henshaw	May Watrous Prof. W.D. Jones Nancy Clarke
	"CONTINUALLY STRIVING TO EXPAND OUR HORIZONS AND CONTENT IN THE INTEREST OF CACTOPHILES EVERYWHERE."		
PUBLISHED QUARTERLY P.O.Box 3723 College Station Tucson, Arizona 85722			

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. Plants 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 accordion-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 comments 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.

-----Nancy Clarke 2-74

DESERT LANDSCAPE PLANTS

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

Tamarisk	<i>Tamarix aphylla</i>
Arizona Cypress	<i>Cupressus glabra</i>
Desert Hackberry	<i>Celtis reticulata</i>
Emory Oak	<i>Quercus emoryi</i>
Arizona Ash	<i>Fraxinus velutina</i>
Arizona Sycamore	<i>Platanus wrightii</i>
Alligator-Bark Juniper	<i>Juniperus deppeana</i>
Native Mesquite	<i>Prosopis velutina</i>
Chilean Mesquite	<i>Prosopis chilensis</i>
Ironwood	<i>Olneya tesota</i>
Blue Palo Verde	<i>Cercidium floridum</i>
Little-leaf Palo Verde	<i>C. microphyllum</i>
Mexican Palo Verde	<i>Parkinsonia aculeata</i>
Sweet Acacia	<i>Acacia farnesiana</i>
White-thorn Acacia	<i>A. constricta</i>
Feather Bush	<i>Lysiloma thornberi</i>
Mexican Elderberry	<i>Sambucus mexicana</i>
Desert Willow	<i>Chilopsis linearis</i>
Willow Pittosporum	<i>Pittosporum phillyraoides</i>
Chaste Tree	<i>Vitex agnus-castus</i>
Texas Mountain Laurel	<i>Sophora secundiflora</i>
Creosote Bush	<i>Larrea divaricata</i>
Hop Bush	<i>Dodonea viscosa</i>
Purple Hop Bush	<i>Dodonea viscosa 'purpurea'</i>
Rosewood	<i>Vauquelinia californica</i>
Sugar Bush	<i>Rhus ovata</i>
Desert Broom	<i>Baccharis sarothroides</i>
Four-wing Saltbush	<i>Atriplex</i>
Jojoba	<i>Simmondsia chinensis</i>
Texas Ranger	<i>Leucophyllum frutescens</i>
Bird of Paradise	<i>Poinciana gilliesii</i>
Dwarf Poinciana	<i>Poinciana pulcherrima</i>
Trumpet bush	<i>Tecoma stans</i>
Cassia	<i>Cassia wislizeni</i>
Feathery Cassia	<i>C. artemisioides</i>
Desert Marigold	<i>Baileya radiata</i>
Fairy Duster	<i>Fallugia paradoxa apache plume</i>
African Daisy	<i>Dimorphotheca sinuata</i>
Lavender Cotton	<i>Santolina chamaecyparissus</i>
Brittle Bush	<i>Encelia farinosa</i>
Fountain Grass	<i>Pennisetum setaceum</i>
Hummingbird Flower	<i>Zauschneria latifolia</i>
Turpentine Bush	<i>Apolopappus lacrifolius</i>
Rosemary	<i>Resmarinus officinalis</i>
Bush Morning Glory	<i>Convolvulus cneorum</i>
Mexican Honeysuckle	<i>Jacobinia carnea (mexicana)</i>
Queen's Wreath	<i>Antigonon leptopus</i>
Ocotillo	<i>Fouquieria splendens</i>
Yucca	<i>Yucca brevifolia</i>
Yucca	<i>Y. elata</i>
Yucca	<i>Y. recurvifolia</i>
Desert Spoon	<i>Dasyliirion wheeleri</i>
Red Aloe	<i>Hesperaloe parvifolia</i>
Century Plant	<i>Agave americana</i>
Aloe	<i>Aloe saponaria</i>

MAMILLOPSIS QUEST

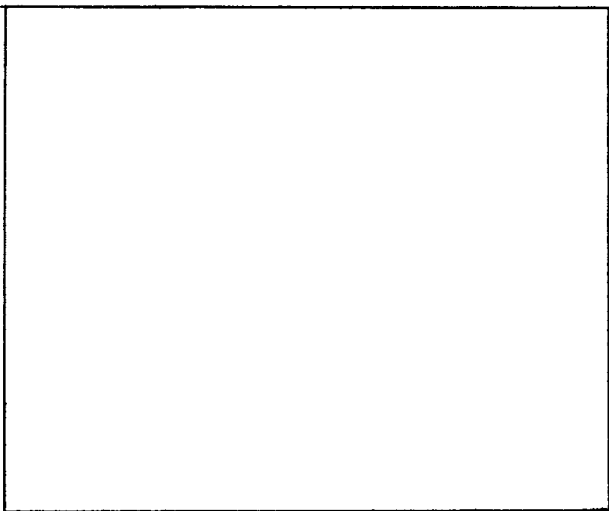
William A. Pluemer

Mamilloopsis 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,

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 Mamilloopsis 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 Kakteenlexicon, 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



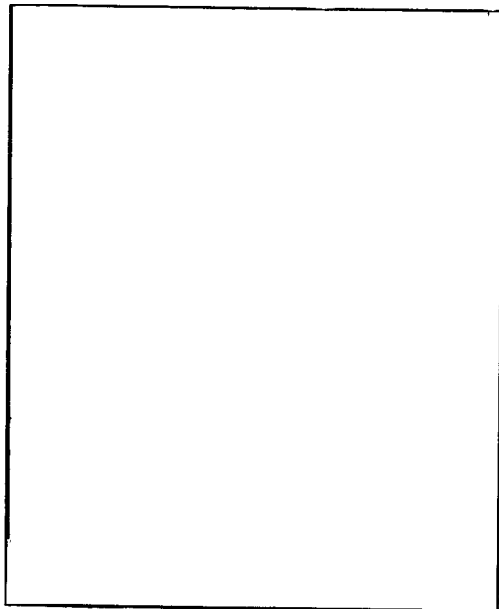
MAMILLOPSIS SENILIS IN SITU

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 mamilloopsis 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. Mamilloopsis 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. "Mamilloopsis!" 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 mamilloopsis 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. Mamilloopsis occurred 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 mamilloopsis. 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

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 mamilloopsis 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.

I N M E M O R I A M

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. Vice President - 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

Membership - Helen Housman.

Julie Porter, Kay Stehulka.

Publicity - Ruth Dougherty.

Publications - Josephine Shelby,

Historian - Dorothy Levering

Lura Fuller, Lena Marvin.

Haag Garden - Edward Busch.

Cactus Show - Alan Blackburn.

Door Prizes - Helen Busch.

Librarian - 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,
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 side-tracked 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.

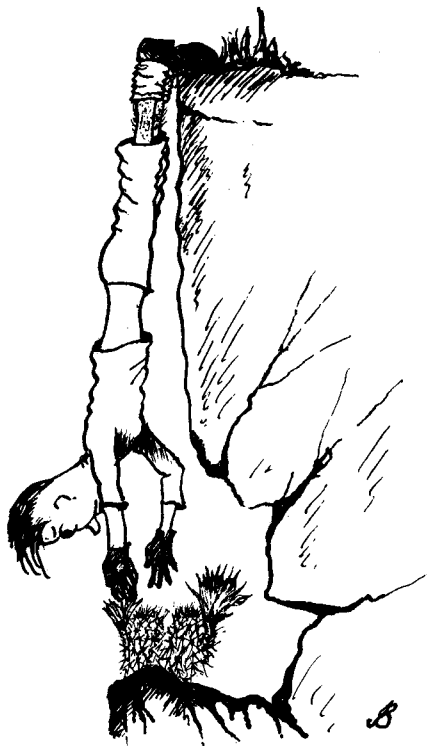
My impressions of the club are first, of some outstanding personalities I have met so far, and next of the fine educational programs presented both in and out of the meetings. Joseph Brick is exemplary for his work in cactus reforestation, and seems to retain his humility even after commendations by 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!

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.

What does it mean?



Drawing by John Bengier

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'l. Cactus & Succ. Jrn'l.
Vol. 26 No. 1. England