

NEWSLETTER OF TUCSON CACTUS AND BOTANICAL SOCIETY

Affiliate of the Cactus and Succulent Society of America, Inc.

P.O. Box 3723 College Station Tucson, Arizona 85722

VOLUME IX

1973

NO.1

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LURA FULLER, LENA MARVIN

BAJA SPECIAL EDITION

Baja California, Mexico, in the Sonoran Desert, is a "beautiful, strange, and enchanting peninsula." Such is its appeal for William A. Pluemer, member of Tucson Cactus and Botanical Society. This issue of CACTUS CAPITAL CHATTER is a BAJA SPECIAL EDITION, featuring his very fascinating report on "Baja--The Vanishing Frontier". The map of Baja and the photographs of some plants of Baja in which he is quite interested, were prepared by him. Tucson Cactus and Botanical Society is fortunate in that one of its most knowledgeable and botanically dedicated members generously contributes fine reports of his Baja explorations which we publish in CHATTER. Thank you, very much, William A. Pluemer.

PRESIDENT'S CORNER

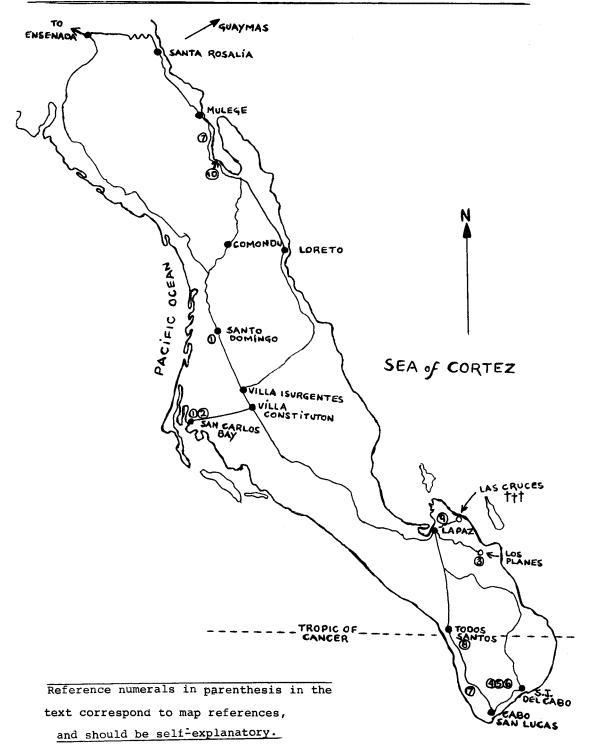
A pretty, mini-skirted secretary sits in the front row. Two rows behind her is a teen-aged boy with hickies. Across the aisle is a white-haired senior citizen couple and behind them we see a huge man wearing tee shirt, jeans, combat boots and looking like he might be a pro football player. Next to him is a hippie-type with long hair and beads. Directly in front of him sits a distinguished looking woman with a tablet on her lap and a pencil poised to take notes.

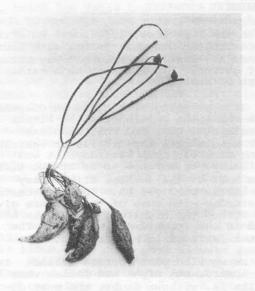
where are we? -- At a meeting of the Tucson Cactus and Botanical Society, of course. The cute secretary bought a 49¢ "Old Man of Mexico" on impulse and is worried about how much water to give it. The teen-ager is working on a science fair project. The senior citizen couple recently retired and moved here from Michigan. Before they saw the desert they thought only roses had thorns and they want to know more about these desert monstrosities. The guy in the combat boots is a landscaper and needs more information on incorporating native plants into his designs. The hippie is a graduate student in anthropology and is writing his thesis on the use of local cacti and succulents for food and fiber by ancient Indian tribes. The lady ready to take notes is a high school biology teacher looking for any new information she can pass on to her students.

This is the problem confronting the Board of Directors in general and the Program Chairman specifically. The members may not get all the information they seek from this one program, but if they attend the meetings over the next year, they will get a great deal of what they are searching for. Since the By-Laws charge the Directors with conducting the business of the club, club business will be held to an absolute minimum at meetings.

We will continue with free plants, door prizes and possibly a surprise trip. For the next year, it's fun, fellowship and painless education.-No final exams will be given and everyone gets an "A".

----Tom Kesson, President

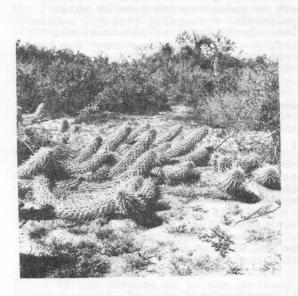




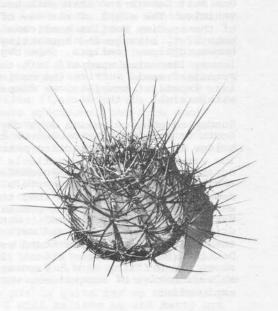
CEREUS STRIATA



ECHINOCEREUS SCIVEUS



MACHAEROCEREUS ERUCA



FEROCACTUS RECTISPINUS

BAJA-THE VANISHING FRONTIER William A. Pluemer

Readers of SUNSET MAGAZINE recall in the September, 1972 issue an article describing the new ferry service linking Guaymas, Sonora with Santa Rosalia, midway down the Baja peninsula. Last year neighbor Ray Lucas and I decided to use this method of getting into southern Baja rather than the tortuous overland route out of Mexicali.

We left Tucson on Friday, November 3rd, planning on a night in Guaymas prior to sailing. Friday afternoon was spent waiting for the ticket office personnel to return from siesta at 3 P.M. and then standing patiently in line as a single clerk handled all the details of vehicle and passenger ticketing. As sailing time was noon Saturday, it was almost a necessity to arrive a day early, or arrange to be at the ticket office early Saturday morning. The cost of the 4-wheel drive Chevy Blazer and its two occupants was a little over \$35 US. The Presidente Diaz Ordaz left promptly at noon Saturday with none of the fanfare given such departures from US ports. We agreed the highlight of the six hour cruise was an excellent meal served in the forward dining room. The price of the meal, of course, was not included in our tickets.

The sun was setting on calm waters as we slid past Tortuga Island. It was dusk as the harbor pilot swung aboard, but night had fallen when mooring was completed. Santa Rosalia is, without doubt, the most depressing town on the peninsula. A copper smelting industrial type portown, it is poorly lit, appallingly dirty and without accomodations. An aura of decadence seems to envelop the whole area.

One must debark and then walk back through the ship's bow to get his vehicle. The sight of the maw of the ferry spawning a myriad varieties of the species Mobilus Americana left me pondering the fate of this beautiful, strange and enchanting peninsula. Campers, pickups, mobile homes, cycles, trailers, dune buggies, sports cars and an occasional luxury limousine sped off into the night. I wondered how long "The Last Frontier" could survive the coming onslaught. Along with several other less impatient tourists, we camped that night on the small public beach within sight of the docks.

Sunday morning our sixth Baja odyssey began on the new blacktop highway South to Mulege, Loreto, and on to the Cape Region via La Paz. A new bridge is under construction over the estuary at Mulege but the existing low water crossing is negotiable by standard cars. Mulege now has 100-octane gasoline and good accomodations at Las Casitas in town, or at the two outlying airstrip-motels. We set up camp that night in the desert just off the paved road to San Carlos Bay. In less than 48 hours we had come distances that ordinarily would have taken about 6 days via Mexicali and "the old road". Monday morning was given to a leisurely drive to San Carlos Bay and return to the main highway before noon. In the dunes near the Bay I found several small colonies of "Creeping Devils" (Machaerocereus eruca) (1), fighting to keep their growing tips above the drifting sand. Ferocactus Townsendianus (2) was here also, as were hordes of mosquitoes, who took the joy out of this particular exploration.

Filling our tanks at La Paz, we continued out the road opposite the old airport (now a military airfield) and left the pavement for the first

time, bound for Bahia Las Muertos. After a straight line nine mile descent beyond the last crest, we entered a rich agricultural valley. Here, along the road near the village of Los Planes, Mammillaria capensis (3) occurs. Plants were visible from the car and collected without much exertion. Several species of cacti were in bloom, including Cochemiea poselgeri and Echinocereus Brandegeei. That night, camped near the Bay, we endured a restless sleep, continually harrassed by flies, mosquitoes and gnats. Since this was the first time we ever experienced nocturnal insects in Baja, we placed the blame on the recent rains and abundance of stagnant water in low areas. To this abundancy of water the desert had responded with such vigor the lush growth was overwhelming. Some of the larger columnar cacti were swollen almost to bursting and there were occasional signs of splitting through over indulgence. Wild verbena ran everywhere, even out into the roads. The variety of fresh ground cover produced a host of larval forms from the giant sphinx moth caterpillars to the dainty larvae of countless species of butterflies.

Arriving at San Jose Del Cabo next morning I selected at random a low hill to collect the tuberous-rooted Echinocereus sciveus (4) along with Mammillaria schumannii (5) and Mammillaria armillata (6). M. schumannii was in bloom, its large pink flowers scattered in profusion over the slope. Within twenty minutes I had selected and collected several fine specimens of each variety. After the restless "night of the bugs", we changed our plans and opted for a motel room with hot shower to alleviate our discomfort. At the Hotel Mar de Cortez in Cabo San Lucas I made good use of a small private patio with dirt floor to clean and pack the plants collected to date.

As the pavement now ends at Cabo San Lucas, most drivers return to La Paz Via the same route. Our next stop, however, was near Todos Santos on the Pacific side, and we were headed North on the dirt road early next morning. Our destination was Rancho La Buerrera, in the foothills of the Sierra De La Victoria, the lower "spine" of Baja. Ray was busy threading around a brackish pond when I caught sight of a strange cluster of tubers exposed in a badly eroded bank. My first thought was that someone must be missing a bunch of sweet potatoes, but with some digging, I was rewarded with a fine specimen of Cereus striata (7). Later on, the red seed pods of these plants led me to two more specimens, but from much different surroundings. Two miles South of Todos Santos a badly beaten sign indicated our Rancho to the East an unreadable number of kilometres. With a little luck and a bit of Baja intuition, we arrived there in an hour.

Vol. XLI No. 4 (July-Aug. 1969) of the CACTUS & SUCCULENT JOURNAL contains a fascinating account of Ed and Betty Gay's pack trip to the summit of El Picacho in search of Mammillaria petrophila and Echinocereus pensiIis. I had hoped to duplicate this adventure, but being less than fluent in the language, could not make my desires tknown to the men at the Rancho. So El Picacho remains on my "Must do" list. However, my limited vocabulary and wildly imaginative sign language got me permission to collect Mammillaria phitauiana (8) from the hillside overlooking the corral. The hill was steep, the footing poor, and a host of flies from the corral suddenly seemed interested in my well being. With considerable sweat and exertion, I managed to find the plants quite far up the hill. Until Ed Gay assures me to the contrary, I will believe he and Bettŷ got the easy ones. Ray, in the meanwhile, had been doing excellent public relations work amongst the youngsters, who thoroughly enjoyed our leftover Hallowe'en candy.

From La Paz the following day we drove out to see the very plush resort of Las Cruces, known to be frequented by such celebrities as Bing Crosby and Bob Hope. Las Cruces is 90 minutes by road or 10 minutes by air from La Paz, a situation that assures a certain amount of privacy for the members. Perhaps we arrived off-season, as the luxurious homes and central buildings were all but deserted. But what cactophile cares about such trivia when he can collect specimen clumps of Mammillaria Baxteriana (9) in the white granite outcroppings along the road? On the return trip, we picked a campsite on a high ridge where a fine breeze kept the insects at bay and we enjoyed counting satellites in the evening afterglow. By now, we had catalogued three favorites and waited for them each evening, although their times of passage varied gradually with the passing nights. "Back country" Baja provides almost total isolation from all man-made irritations. There are no lights; there is no smog; there is no noise nothing but the brilliant sky overhead and the quiet fascination it provides after a long, exciting day of discovery and collecting.

From La Paz we retraced our route North on the highway to Villa Isurgentes, the intersection of the new paved road going back to Santa Rosalia, and "the old road" going North to San Ignacio. We continued straight on to Santo Domingo where I wished once again to photograph some colonies of "creeping devils" (1). Somehow, no matter how many times I have photographed this plant, it always seems to draw me back anew. Immediately upon turning off the road toward town, one sees these odd cacti. The October rains had turned them into swollen monsters of magnificent proportions. While I treaded gingerly among them with tripod and camera, Ray changed the oil and checked the Blazer for the next leg of our trip.

The turnoff to Comondu is about an hour's drive North from Santo Domingo. Although we had not been on this particular road before, we had no trouble in raising Comondu in fast time. Ferocactus rectispinus (10), the long-spined beauty, is at home East of Comondu and I was intent upon collecting it for the first time. Our camp that night in the hills out of town, once again proved that Baja can make fools of the over-confident. The next morning we spent three hours in useless driving and backtracking as the result of taking the wrong turn out of town the previous afternoon. Finally, once back on the right road, I settled down to look for my quarry while Ray drove and muttered to himself about our abilities as navigators. Adding insult to injury, not a plant did I see, and suddenly we found ourselves emerging on to the new highway somewhere North of Loreto.

In his series on Baja in the C & S JOURNAL Ed Gay mentioned finding the plants at Bahia Del Coyote, on Conception Bay. After spending the night at the Flying Sportsman's Lodge on the beach at Loreto, (I heartily recommend you take your meals elsewhere) we left for Conception Bay. Looking far down from the new highway, Coyote Bay can be seen as a fine, crescent shaped beach with a few palms and other trees almost at the high water mark. Ed had mentioned climbing up from the beach to a rock ledge where he had found the plants. At that time, the new highway was under construction and the old road ran along the water line, quite far below. Pulling off the blacktop I reasoned that we were already on top of the rock ledge and thus began my search. My first glimpse of a bluegreen 6-inch plant, its stiffly erect 6-inch spines backlighted in the sun, sent my blood pressure up several notches. From the ridge, I was yelling to Ray "I"ve found one - I've found one!" Fortunately the campers on the beach were so far down they were not disturbed by the crazy gringo crawling around on the hot rocks while there was swimming

and fishing to be done. A six-inch plant is not large, but when it sports six-inch spines, you must have quite a large box to properly protect it. One can't handle many such specimens at the end of a long collecting trip. We made our way down to the beach, lunched, and returned to the pavement via the old road along the beach as the tide was then out.

The collection of this beautiful fero completed my list. For old times' sake, we decided to drive out via El Arco, Portecitos, San Felipe and Mexicali; thence to Nogales to clear the plants. Had we known the extent of the destruction caused by the October storms, we certainly would have returned via ferry! The coastal road North of Gonzaga Bay, as we knew it had all but disappeared. Once a sandy, washboarded surface, we now found it a continuous rubble-strewn draw. In places, the washouts had cut through the dunes on their way to the sea. Our sighs of relief upon reaching the pavement at San Felipe were short-lived as this road had been severly undercut in numerous places making it dangerous by day or night.

With all the uncertainties and grinding hardships, driving the "old road" created a sense of comraderie and even achievement for those who knew it. The unwritten law was to stop and offer assistance to any and all. Approaching vehicles always pulled up to exchange the latest information about road conditions - or even perhaps carry a hastily scribbled note to the U.S. for mailing. Now the new highway, rapidly extending from both North and South for the first time provides a rapid means of access to Baja for the American tourist. We had a glimpse of the future of Baja in the Cape Region. More and more cars rush by; new motels are mush-rooming everywhere; the beaches are being fenced off by the government for future exploitation; owners are posting "Privada" signs along the road and new barbed wire is being strung. Fortunately, the lure of the Baja will always exist for those still willing to endure the hardships and fun of exploring the back roads of the interior.

Tucson Cactus Club members may now purchase aloe, cactus, and other succulent meeds from the Seed Bank of The Aloe, Cactus and Succulent Society of Rhodesia, Africa. Seriously interested members may get information from Affiliate Director, Josephine Shelby.

THE LIBRARY of Tucson Cactus Club is located at 2754 N. Campbell Avenue, in the Nancy Clarke Insurance Agency office.

CHAIRMAN of our 1973 Annual Cactus Show is Alan Blackburn.

Mr. and Mrs. Harry Yocum, members of Tucson Cactus Club, celebrated their fiftieth wedding anniversary at year's end -- 1972, with an open house at their home.

John Hales writes CHATTER from 17 degrees below Q, Denver, Colorado: "One nice thing about the Desert -- you do not have to shovel the HEAT!"

Helen Bolton, a former, long-time member of Tucson Cactus Club, visited the January meeting.

CORRIGENDUM: The correct Volume Number for CACTUS CAPITAL CHATTER 1972 No. 4 is VIII.

THE ADAPTABLE ALOE

Aloes are African plants. Some species have escaped to nearby islands and across the Red Sea to Arabia, but the genus is essentially African. Aloes have adapted themselves wonderfully to Africa's many moods: from conditions of the harshest desert where rain may not fall for years on end, to areas that are subjected to tropical deluges. This tremendous adaptability has resulted in the evolution of several hundred species, 30 of which are native to Rhodesia. Species vary from minute grass-like plants such as Aloe myriacantha of the Eastern Highlands to the magnificent nobility of the widely distributed Aloe excelsa, Rhodesia's tallest species.

Aloes are succulents. The name "succulent" is not a strictly scientific term. It merely indicates that the plants have fleshy leaves and stems. Many succulents are xerophytes which simply means that they are wonderfully adapted to withstand prolonged drought. The fact that a plant does not have to be watered during the long Rhodesian dry season is a strong point in its favor. Apart from an incredible built-in toughness, many species have spectacular flowers which are usually at their best during the drab winter. Even when not in flower, most are beautiful because of their striking sculptural forms.

-----Robert Turner, Rhodesia, Africa

LOOKING AHEAD

March 11, 1973. Monthly meeting at Arizona-Sonora Desert Museum.

April 7, 8, 1973. Annual Cactus Show at Recreation Room, Randolph Park.

May 14-17, 1973. National Convention of Cactus and Succulent Society of America, Inc.

JOHN ROBBINS writes Chatter that he is in the market for used journals and books on cacti and the other succulents, and botany in general. Send John titles of materials you will sell, authors, condition, edition, etc. Write to John c/o James A. Robbins, Box 1, Sierra Vista, Arizona, 85635. John is in Japan and expecting to go to Okinawa and Thailand.

ARIZONA'S NATURAL BEAUTY is a fragile, God-given thing. Those who are capable of obtaining inspiration and pleasure from it have a right to its preservation. It is a right that should not be violated by those esthetically illiterate persons who can be satisfied with ugliness and disorder in their environment."---Phil Stitt, Editor, Arizona Architect.



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Affiliate of Cactus and Succulent Society of America, Inc.
Subscriptions: \$1.00 -- U.S.A. \$1.50 -- Foreign

VOLUME IX

1973

No.2

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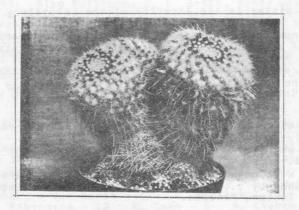
Lena Marvin

"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

REPORT OF 26TH ANNUAL CACTUS SHOW AT DESERT BOTANICAL GARDEN
This 26th Annual Cactus Show, February 18-25, 1973 at Desert Botanical
Garden in Papago Park, Phoenix, attracted more than 116 exhibitors entering more than 650 individual exhibits. On opening day, 3000 enthusiastic
visitors enjoyed high quality cacti and leaf succulent plants, dried arrangements, paintings, drawings, photographs, desert woods and miniature,
desert roots. TUCSON AWARD WINNERS were Alan and Betty Blackburn. Alan's
awards were: Sweepstakes in cacti. Trophy Winner in: Mammillaria,
Dish Garden, Patio Planter. His Dish Garden has won for 3 years. For
the above, he won 4 cups. He won 29 Firsts, 21 Seconds, and 10 Thirds in:
Cacti. Class A, Potted Plants. Class B, Crested. Class C, Monstrose.
Succulents Other Than Cacti. Arrangements. Dish Gardens. Hanging Baskets.
Betty won 2 thirds: one in miniature arrangements and one arrangement of
other succulents.



EMPHASIS ON CREOSOTEBUSH AT FEBRUARY MEETING OF TUCSON CACTUS & BOTANICAL SOCIETY

Creosotebush is the most successful, widespread and readily recognized desert plant of the https://docs.org/line-nc-regions-stands as to constitute true Larrea plains. Its common companion is the grayish green bur-sage (Franseria deltoida, in Arizona). Bur-sage is one of the major plants of the Paloverde- Bur-sage - Cacti plant association (one of the three plant communities of the Sonoran Desert). Creosote bursts into full flower in April or May. A close relative of creosotebush is Caltrop (Arizona-Poppy), Kallstroemia grandiflora in Arizona. Another of its close relatives is Puncturevine (Tribulus terrestria).

In Mexico, poultices of creosotebush are applied to bruises and sores. Decoctions of creosote leaves have antiseptic properties. In primitive medicine, these decoctions are taken internally for tuberculosis and gastric complaints. Like other ubiquitous plants with peculiar odors or flavors, creosotebush has tended to become a cure-all.

The Argentine Desert of Central Argentina in South America is similar to the Sonoran Desert in North America. There, creosotebush is most widespread also. The desert plants and the terrain of this area were the theme of a lecture by Dr. W. T. Yang, ecologist at the University of Arizona, at the February meeting of Tucson Cactus & Botanical Society.

DESERT MUSEUM "ZOO" BBC PRODUCTION, FEATURE OF MARCH MEETING OF TUCSON CACTUS & BOTANICAL SOCIETY
The British Broadcasting Company has produced a special series featuring its choice of seven outstanding zoos of the world. Arizona-Sonora Desert

Museum was chosen as one of the seven. The March program of Tucson Cactus & Botanical Society presented this film about Desert Museum's "zoo" aspects. Don Ducote, Curator of Plants, Museum Staff, was in charge of this program. Hostess Goldie Dean served refreshments at the social hour following the program. Members visited Haag Memorial Cactus Garden, the Society's gift to Desert Museum, memorializing our founder, "Cactus John" Haag.

"THE REMARKABLE TREE - RING STORY" SUBJECT OF T.C. & B.S. MAY MEETING

Professor Bryant Bannister is the director of the Laboratory of Tree-Ring Research at the University of Arizona. A staff and faculty member since 1953, he is known for his tree-ring dating research and projects concerning dating of archaeological sites in the United States and Mexico. The native Arizonan has been a collaborator of the U. S. National Park Service and a research associate of the Museum of Northern Arizona. • At our May meeting he explained the remarkable and unusually precise method of absolute dating of ancient sites by the tree-ring method.

<u>FAREWELL TO LADISLAUS CUTAK</u> of world cactus and botanical fame, who passed away recently:

"We have no dearer word for our heart's friend, for him who journeys to the world's far end,

And scars our soul with going; thus, we say, as unto him who steps but o'er the way----'Good-by'....from the members of Tucson Cactus & Botanical Society, Tucson, Arizona.

PUBLICITY FOR 1973 TUCSON CACTUS & BOTANICAL SOCIETY'S CACTUS SHOW

Our 1973 Director of Public Relations, Frederick Littman, was in charge of publicity for our 1973 Cactus Show. He "left no stone unturned", to spread the news of our Show to the Tucson area. He is an alert, energetic and dedicated worker, in bringing the Tucson public and our club to each other's attention. He arranged for Miss Barbara Cavanaugh, Curiel Elementary School, Eloy, Arizona, to paint handsome posters which he hung in the following places: Food Giant--Berkshire Village; Tanque Verde Trail Florist; F. W. Woolworth Co., Down-Town; Clarke Insurance Agency; Gift and Cactus Shop; Van's Shat-R-Proof Glass; Southgate Shopping Center; Tanque Verde Greenhouse; Handy Andy Store; Hughes Aircraft Co. Builetin Board. Board. He sent Cactus Show Announcements to Radio Stations KHOS, KCEE, KCUB, KTKT. He wrote letters to: Tucson Daily Citizen Editor; Arizona Daily Star Editor; Citizen Club Notes; John Harlow--Week-end Gardener; Don Schellie, columnist of the Citizen; Windy's Column in the Star; He posted letters on Bulletin Boards at B'nai B'rith Foundation, U of A., Desert, Tucson Estates. Get acquainted with him. Tell him that you appreciate his work.

Show Chairman, Alan Blackburn, furnished our members with small, printed announcements of our Show, to distribute widely. Blackburns placed a potted cactus in Woods Memorial Library to advertise the Show. Nancy Clarke was the guest of Verne Owen on the Green Thumb radio garden program on April 7. Our Director of Public Relations in Green Valley, Arizona is our dedicated and energetic member, Ruth Dougherty of the Green Valley News. She covers every meeting of T.C.B.S. and its outside activities such as the bus trip to Desert Botanical Garden, and the Cactus Show. She delivers this fine publicity material to our historian for our club history book.

1973 ROSTER OF OFFICERS, MEMBERS OF BOARD OF DIRECTORS AND COMMITTEE CHAIRMEN OF TUCSON CACTUS AND BOTANICAL SOCIETY

OFFICERS: President: Dr. Thos. J. Kesson. Vice President: Dr. Paul S. Henshaw. Secretary: Mrs. J. V. Merrill. Treasurer: Mrs. Lois Clarke. BOARD OF DIRECTORS: Alan Mollison, J. F. Brick, Nancy Clarke, J. V. Merrill, Hildegard Nase, Roger Dean, Josephine Shelby, Carl O. Horst.

COMMITTEE CHAIRMEN: Program: Paul Henshaw. Public Relations: Frederick Littman. Membership: Christine Henshaw. <u>Cactus Capital Chatter</u>: Josephine Shelby. Refreshments: Goldie Dean. <u>Librarian: Nancy Clarke</u>. Affiliate Director: Josephine Shelby. Spring 1973 Cactus Show: Alan Blackburn. Haag Garden: no chairman. Historian: Dorothy Levering.

THIRD ANNUAL CACTUS SHOW OF TUCSON CACTUS AND BOTANICAL SOCIETY

During April 7 and 8, 1973, 750 Tucsonans attended and enjoyed viewing and studying the 345 plant entries of 23 members, tabulated as follows: Housman - 36; Levering - 6. Marvin - 8. Merrill - 10. Nase - 25. Duale (non-member) - 1. Roubicek - 2. Stehulka - 5. Walker - 5. Zaitlan (non-member) - 7. Horst - 17. C. Henshaw - 14. Fuller - 2. G. Fisher - 22. Ethington - 12. R. Dean - 5. N. Clarke - 60. Church - 12. Christensen - 14. L. Cheeseman - 5 (Youngest exhibitor). Brick - 4 and 1 flat of seedlings. B. Blackburn - 1 arrangement. A. Blackburn - 72 and 1 flat of seedlings.

Alan Blackburn was general chairman of the Show. The following members worked steadily as plant salesmen for T.C. & B. S.: N. Clarke, H. Roubicek, E. Niehus, A. Christensen, K. Stehulka, D. Levering, K. Clarke. Members selling their own plants were: G. Fisher, A. Blackburn, the Roger Deans, N. Clarke, H. Roubicek. Those donating plants for sale were: Christina Walker, M. Church, A. Christensen, K. Stehulka. Every exhibitor entering 5 or more plants received a free cactus plant. Rodney G. Engard, Assistant Horticulturist at Desert Botanical Garden of Arizona at Phoenix, loaned to the Show his Herbarium Display of Plants Useful to Man and to Animals. One of the most unusual plants was exhibited by our member, Helen Roubicek. Her crested Monvillea Speggazini is a large, graceful, curving cereus whose flower is cereus-like as are most of the plant's characteristics. Helen keeps all normal growths off this plant in order for it to continue to produce fans (cresting).

Cacti were exhibited in groups according to their native habitats, as: Mexico, South America, Africa, United States. Other classifications were: crested cacti, succulents other than cacti, dish gardens, terrarium, strawberry jar, patio planter, hanging baskets, educational exhibits, oil paintings of desert subjects, small arrangements. Josephine Shelby as Affiliate Director of T.C. & B. S. exhibited many publications from cactus clubs of the U.S.A. and foreign lands. Also, she showed interesting correspondence from our kaktophile friends abroad, in New Zealand, Belgium, Czechoslovakia, Japan, England. Thus our members and the Tucson public learned how wide are our contacts in the field of our cactus interests.

Many members worked in various capacities to assure the success of this Show. In addition to members heretofore named, the following are credited: the C.P. Craines, Mrs. C. Martin, the Coans, Tom Kesson, Mr. & Mrs. Edward Busch, the D. E. Millers, R. Dougherty, A. Grodson, M. Toombs, A. Steininger, the E. D. Cliffords, J. Porter. For the excellent publicity given our Show by our Director of Public Relations, Frederick Littman; also Chairman Blackburn, Nancy Clarke, and Ruth Dougherty, please read a separate report in this issue. " (Publicity for 1973 Tucson Cactus & Botanical Society's Cactus Show." (Names herein are abbreviated due to limited publishing space).

FROM BLACKBURN'S CORNER

Mammillaria bombycina is one of my favorite mammillarias, having 2-4 centrals, white at the base, turning amber-yellow with a brownish-red tip. All are slender; upper central spines, straight; lower central is hooked. Lateral spines 30-40, all thin and straight, white in color. The top third of the plant is covered with white wool from which the carmine-red flowers emerge. This plant is caespitose (meaning to grow in clusters). Individual heads are 4" high and 3" wide. The plant is reported to grow in Coahuila and San Luis Potosi, Mexico.

Culture. Mine are grown in 3 parts sand and 1 part Bacto Potting Soil. Good drainage is a must, as the plant will rot off at the base if given too much water. Water once a month, September until March; then oftener as needed, allowing the soil to dry out between waterings. This plant is hardy if kept dry in the winter months; does better in half-shade or on a patio. It is not good indoors. Fertilize. Use any balanced plant food as per instructions on label. Do so about every 3 to 4 weeks during the growing season, or from the time when you first notice new spines showing in the crown of the plant. It is pronounced: bom - bis - cina.

SHOW AND TELL.

Alan Blackburn has introduced a new idea for each meeting. At a late meeting, he took one of his plants that he quite enjoys, and told members why he does. Dr. Henshaw has asked that a member do this at each meeting.

WHAT YOU HAVE ALWAYS WANTED TO KNOW ABOUT GROWING CACTI.

The questions that you have wanted to ask about growing cacti will be answered by your attending Alan Blackburn's Workshop every other Friday at 1 p.m. at his home, 5160 West Sweetwater Drive. At the first meeting fourteen interested club members took notes on soil mixture and watering. Alan's special soil mixture consists of 3 parts sand to 1 part Baccto Potting Soil. He supplements this with a balanced plant food---Marvel. During the winter months, plants should be left dry until the first signs of growth appear. Until you have become familiar with each plant's required amount of water, follow the rule of thumb: water thoroughly, then allow plant to dry out before watering again. Most cereus plants take more water than others. Alan insists that cactus growers learn the botanical names of cacti. Come. Question. Learn.



ENJOYMENT PLUS ON A CACTUS BUS

On March 25, a beautiful desert spring morning, one busload of cactus enthusiast T.C. & B.S. members departed from Randolph Park for a leisurely drive via Florence Highway toward their goal--Desert Botanical Garden in Papago Park, Phoenix. Roadsides were literally lined with lupines so blue, yellow desert marigolds and orange Mexican poppies. Tom Kesson,

T.C. & B.S. president, led the group which was met by W. H. Earle, Director of the Garden. It was ablaze with beauty in both cacti and wild flowers. The return trip was broken at Picacho Peak for all to enjoy the spectacular carpet of poppies covering the desert floor and slopes there. SEE SKETCH..page 5...a cartoon from 1973 Calendar of Hamilton Branch of Cactus & Succulent Society of New Zealand.

WHALE WATCHING - 1973 Paul S. Henshaw

Today's expedition whale watching is much like the legendary whale hunting of old. There is a mother ship; there are smaller boats for getting in close; and the man in the prow of the smaller boats stands with a camera instead of a harpoon.

But let us begin at the beginning. Early in January 1973, Mrs. Henshaw and I were privileged to go on an excursion with about thirty other adventurers -- mostly university people -- to explore in and around the fabled Scammon's Lagoon on the west coast of Baja California in Mexico. The main objective was to observe behavior of the great Gray Whales in their natural winter habitat.

Departure was at midnight Saturday, January 6, from San Diego aboard an H & M Landing's 80-foot sports fishing vessel with a well stocked galley and open bunking areas. Our craft was called the "Mascot IV." Thirty hours later we were at San Benito Island, where for most of Sunday we followed faint trails on steep mountain sides of volcanic tundra along the shores, observing exotic plants and animals, especially natural groupings of Elephant Seals sequestered in the rugged coves on stony beaches. Like most other people, I had seen movies and read various accounts about seal harems with their dominant bulls and peripheral males, but somehow the reality of such behavior did not seem distinct or clear, and I had not actually allowed for it. Here it was plain as day in front of us and repeated over and over again in the rocky coves.

The separate cove groupings consisted of one to several dozen females (I counted more than 50 in one group), one clearly dominant male and up to three or four subdominant or challenging males, usually at the periphery of the group. Challenges of dominant males by subdominant ones obviously was frequent for we saw some fierce fighting and a number of bloody and scarred necks of the males in different groups. More often, however, the challenges seemed to be settled by menacing threats by the dominant male --his physical superiority having been fully established at an earlier time. Fighting between dominant and would-be dominant males is an awesome show as 16-foot 5000-pound protoplasmic hulks lunge at each other with sharp teeth and blood curdling sounds. Interestingly, studies reveal that more than 80 percent of the young are sired by the dominant males. Sad was the sight of weaker and older males alone in coves to themselves.

At the time of our visit, the young were numerous - - perhaps two-thirds as many as the number of the females. In the first weeks of life, they are black and active, yelping and a good deal of the time searching for one of the two elusive buttons on the mother's belly that sustain them. Seal mammary glands are inside the mother's body, as well they should be, as the mother's heavy body scrapes over sharp rocks. Only an extendable button protrudes for the young to find. Seal babies must be quite intelligent, or at least persistent, to be able to find their source of food.

Attrition rates are high among the young of Elephant seals, for in the different rookeries we usually saw from one to several that were dead. Among other things, the smaller animals seemed to get crushed by the lumbering close order movements of adults. It is reported also that females sometimes fatally attack the young that somehow have become separated from their own mothers.

Elephant Seals are remarkable for the sounds they make -- sounds which can be compared with the barking of dogs, the bleating of sheep and the shouts of children. The adult males make quite unique sounds. They rear up, throw back their heads, open their large mouths, inflate the enlarged probosis extending some of it into the mouth, and make a "clonking" noise in their throats that resonated in the probosis. At a distance of some yards, the so-called "clap-throat" sound reminded me of a garage mechanic striking a brake drum with a wooden mallet. This sound is of low frequency and easily heard over the sounds of the surf or over other sounds of the rookery. Investigators have shown that these particular sounds differ geographically and resemble the local dialects of birds and mammals. Wednesday morning, Mascot IV pulled into the broad and somewhat quieter waters of Scammon's Lagoon. On the way from San Diego, a number of whale "blows" had been sighted. Now they were more frequent, one, and sometimes several, being observed every few minutes, as our vision extended out for a mile or so from the ship we were on. Seeing these, I felt the excitement that must have been the excitement of early whalers when they shouted: "Thar she blows!" Beneath the vapor spouts, one could be certain there was a mighty leviathan-a creature that was alive and had enormous strength. On occasions it was possible from the decks of Mascot IV to see at close range a whale surfacing like a mighty submarine, exhaling its breath, arching its expansive back and diving again as the powerful fluke came into full view above the water.

Now Scammon's Lagoon spreads over an area roughly 30 miles long and 15 miles wide or 450 square miles. A little more than half of this is water and it is a lot of space even for whales. The area is surrounded by sweeping sand hills which are totally uninhabited by people. Going into Scammon's Lagoon was an experience in itself, since we have become pretty much accustomed to the idea that there is no place on earth that has not been substantially altered by man. Here there were no marinas, no factories, no aircraft, no automobiles and no smog -- just nature in its pristine form, and with awareness that whales were around us by the hundreds even if not by the thousands.

After moving cautiously among the sandy shoals for several miles into the Lagoon, Mascot IV was anchored and two small skiffs with strong outboard motors were put into the water. Soon these were loaded with four to six people adorned with bright orange life preservers, and off they went for close range observation. In time, someone shouts: "Thar she blows" or "Thar they blow", depending on how many, and the pursuit was on - sea water splashing on everyone. The object of this game is to guess where the whale, or whales, will surface next, and be close enough when they do to see well, but not be tipped into the sea by a surfacing animal. Now a thing about whales is that they do not necessarily travel in a straight line. Moreover, as if to play tricks, they hold their breath for varying lengths of time --sometimes a number of minutes. With good luck, however, fine views can be obtained of a mother and calf traveling together, of a pod consisting of 3 to 6 animals, or simply of single adults traveling alone. One of our skiff groups got a little more than they bargained for, inasmuch as a huge fluke lifted out of the water so close that it poured enough water into

the boat to require a quick trip to the mother ship for special bailing-out action.

Gray Whales have a special act that is great to see. Occasionally, they project the fore-part of their massive bodies vertically out of water as if to have a good look around, coming down then with a terrific splash. In whaling parlance, this is called "sky hopping" or "breaching".

Young of the Gray Whales weigh 1500 to 2000 pounds at birth. They are born in the water and must be taught at once by the mother to surface for air. Failure in this assistance by the mother means certain death from drowning. During our time in Scammon's Lagoon, two dead baby whales were seen, which obviously had been washed ashore at high tide. Although they were more than fifteen feet long and appeared to weigh at least 1500 pounds, indications were that they had lived no more than one or two days. There was evidence that they had become trapped in shallow water in such a way they could not be aided by their mothers, and simply perished.

Family life and reproduction; as carried on by the Gray Whales, are quite different from those functions in the Elephant Seals. Instead of harems and polygamy, Gray Whales appear to practice a kind of polyandry -- more than one male per female. Reports are that breeding females, as they' migrate southward from their feeding areas in the Bering Sea, are accompanied by two males, as a rule. Some studies suggest that a choice is made between the two males before entering the Lagoon, and others that both males participate in the mating process, taking surns supporting the female in the deeper waters, and also in the actual insemination. Because his anatomical features are similar to those of ancient forms, the Gray Whale is said to be primitive, but his sexual and reproductive behavior, by certain criteria, can be said to be more advanced inasmuch as sex and reproduction are more democratically shared.

Exploring the west coast of Baja California was special, but what were the lessons learned? One in particular stands out for me. A few years ago, the Gray Whale was an endangered species. Whaling in the migration routes along the western shores of North America was intense in the period around 1850 -- and the more so because of the discovery of Scammon's Lagoon shortly before. By 1900, Gray Whales were becoming scarce, and by 1925 there was fear of their extinction. Interestingly, however, in 1937 an international whaling Commission was formed and there was tacit agreement that the taking of Gray Whales should be sharply curtailed, and now the species is coming back. Whereas 40 to 50 years ago, only a few hundred animals remained, now there are many thousands again. The recent history of Gray Whales illustrates so well how the fate of certain large animal species rests so completely in the hands of man.

NAMES OF ADDITIONAL 1973 MEMBERS: Mr. & Mrs. W. D. Haselton, 5155 Capana Circle, 85718, Tucson, Phone 887-8102. Mr. & Mrs. Joseph Fraps, 7525 N. San Lorenze Dr., Phone 297-3252, Tucson 85704. Mrs. Edna Zeavin, 7901 E. Mabel Dr., Phone 296-9746, Tucson 85715. Mrs. Betty Jo McCracken, 7603 E. 42nd St., Phone 790-2202, Tucson 85730. Mrs. Louise Hillgert, 1225 E. Adelaide St., Phone 623-3033, Tucson 85719.

The membership of T.C. & B.S. extends to Alan Blackburn, 1973 Cactus Show Chairman, its thanks for this Show so well organized and well run.

William Pacey of Indiana, cousin of Betty Blackburn, visited her during our Cactus Show. He worked in every department of the Show needing help, on Friday night, Saturday and Sunday. T.C. & B. S. appreciates his volunteer help very much indeed.

| ACTUS | 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 |
|---------------------------|--|
| APITAL H <u>A</u> TTER | VOLUME IX 1973 NO.3 |
| | EDITOR CONTRIBUTORS Josephine Shelby CIRCULATION William A.Pluemer Joseph Brick Loleta Schacht Kay Stehulka Lura Fuller Alan Mollison Lena Marvin |
| | "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 |

OF MAMS AND MISSIONS William A. Pluemer

For those who might like to combine their cactus collecting with historical sight-seeing, our neighboring state of Sonora, Mexico offers great possibilities. In an area of some 70 thousand square miles, one can still find about 135 standing missions and the ruins of countless others. My guess is that there are also about 100 species of cacti to be found in Sonora. Taken together, the plethora of cacti and missions makes an interesting combination, offering rewards to both the cactophile and the amateur archaeologist.

Much of Sonora is given to the mountainous Sierra Madre Occidental, and its rivers generally flow North to South. As most villages are strung along the rivers, it follows that one will also find the missions in these fertile valleys. Travel between valleys in an East-West direction can be difficult as there are few passable roads across the ranges. On a short, three day trip in December 1972, we entered Sonora via Agua Prieta, continued South through Nacozari, Cumpas and Moctezuma to Mazachui. Here we turned North to follow the Rio Sonora for the purpose of examining the 8 existing missions along this route. (See map). All of these missions are said to predate their California counterparts by 150 years or so.

Our serious collecting was limited to the South leg of this tirp. A few miles out of Nacozari, on low hills along the road, one can find the minute Mammillaria Goldii. In the dry season, these tiny heads are pulled far down in hithe volcanic tuff, and one must virtually crawl about, gently brushing aside the rubble to expose the plants. If one is lucky enough to hunt after a late winter rainfall, the large reddish flowers make excellent markers and make the job much easier on the knees. Since this was my second trip to this locale, I was not intent upon gathering many plants, but wanted to secure several still bearing seeds. M. Goldii is unique in that the seeds ripen in a recessed ovary well below ground level, as shown on the accompanying photograph. The ground level here was well above the two seeds, where the tubercles first appear. The plant in the photo measured about three-quarters of an inch in height and diameter above ground. Although this little jewel was first discovered by

Dr. Dudley Gold 50 years ago, its official recognition and description was not announced until the summer of 1968, when it was published in the Cactus & Succulent Journal No.4 of that year.

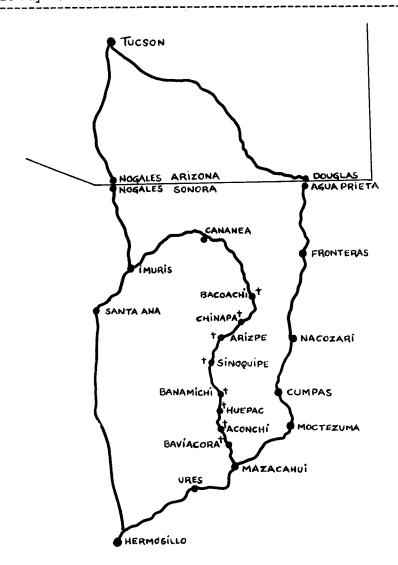
Some miles South of Cumpas we stopped in the rolling hills to collect the large gray-spined Mammillaria Meigiana. Again, this plant has been known for some years, but was only recently described and named by Mr. W. Hubert Earle of the Desert BotanicalGarden, in the Aug. Sept. 1972 Saguaroland Bulletin #7 of that organization. We found single heads of 8 inches not uncommon; a few even larger; and an occasional cluster. The clustering plant in the photograph is in an 8-inch pot. Typical of most Sonoran mams, the flowers tend toward red. In camp near the location that night I could not help but compare this "maxi-mam" with the Nacozari "mini-mam" and think back to the days of the once popular Mutt & Jeff comic strip. Our planned collecting ended here, and in the cool of the next morning we made our departure for the Rio Sonora missions. Getting from the Rio Moctezuma to the Rio Sonora was a first class thrill. The mountain vistas were worthy of several steps. Had the ranges been snow-covered one could easily have fancied himself in ski country. Then, new pavement coming east from Hormesillo surprised us before we raised Mazacahui.

The 8 missions of the Rio Sonora all had their origins in the mid-17th century. For myself, as a cactophile, this time-frame was sufficient, if not impresive. All bear evidence of restoration to various degrees and all bear the scars of three centuries of time and weather. Baviacora immediately generates more than average interest because of the distinct Moorish dome atop a plain minaret. One can here pause and wonder why this type of architecture should appear buried so deep in Sonora. All that seems lacking to complete the illusion are in few colorful Turkish tiles, an Arabic scrawl, and the ubiquitous muezzin the the tower. At Baviacora the pavement ends. In happy ignorance we soon found ourselves splashing along the river bed in four-wheel drive, enjoying the smell of cool water and marveling at the giant, golden cottonwoods. The two massive octagonal towers of Aconchi lured us from the river bed, as they rise well above all surrounding structures in this village. However, the most fascinating feature lies within the mission. Above a plain altar stands a surprising black wooden crucifix, decently clad in a short white dress!

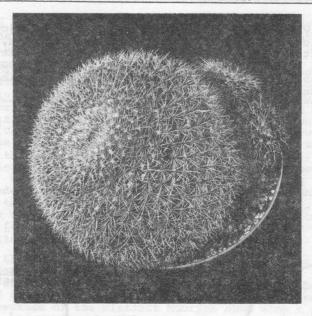
Records show that Huepac reached its zenith by the year 1678. Recent restoration has given the front of the main building a new plaster uplift and a new belltower sporting two bells.

We found signs of life few and far between. I best remember Huepac because it was here we left our river bed freeway for the last time, chagrined to find that some miles back, we had somehow missed the existing parallel road up on high ground, After a cursory examination of the drab Bahamichi mission, we selected a good campsite out of town for our last night on the road. Sinoquipe, early next morning, all we found standing of the original mission was the belltower. Some 20 years ago, the bottom half of the structure was encased in concrete to prevent further deterioration. Since this concrete apron did little to enchance the charm of the mission, we wasted little time inspecting it. Arizpe we found to be a sizeable town, and its mission was in keeping with these surroundings. Here we found good photography difficult because of the limited space facing the massive structure and belltower. It became obvious that one would have to get permission to use adjacent rooftops to properly photograph the entire structure. This, we did not do, being satisfied for the moment with poorly composed "tourist" shots. Arizpe boasted one of the finer interiors, with a host of paintings and gilded reredes. After the magnificance of Arizpe, Chinapa was discouraging. It is very small, and except for the arched belfry with its two bells, quite uninteresting. The building behind the belfry is said to be the original. Bacoachi, our last stop, surprised us with a modern red brick building topped with a white bell tower.

Our road finally met the pavement near Cananea and we enjoyed the hill scenery of Mexican Route #2 to Imuris. Thence to Nogales, where the plants were left for inspection. Although the mileages involved in this trip seem small between to as, any adventure into this country should be well planned, to include sufficient food, water and camping gear, even though it may not be used.



Photography and cartography by William A. Pluemer.



MAMMILLARIA MEIGIANA Cumpas. Sonora Dec. 1972



MAMMILLARIA GOLDII

1973 CACTUS CLUB YEAR OFFERS THREE MORE MEETINGS. Decreasing attendance and somewhat waning interest of many T.C. & B.S. members were laid in part to the 100 plus degree summer temperatures in Tucson. For the first time in the 13-year history of the Club, members succumbed, and the July and August meetings were cancelled. 1973 meetings resume on September 9 when President Tom Kesson presents his "Personal Observations in the Soviet Union" where he travelled earlier this year. October continues with a meeting. November brings the annual choosing of officers for another year. December meeting will likely be cancelled for a Christmas social gathering not yet determined.

ALAN MOLLISON'S GUIDED NATURAL HISTORY TOUR

Alan Mollison, T.C. & B.S. member, is a natural history guide par excellence, due to his profession as a forester and to his varied interests in Nature. In June he guided our members on an extended safari, starting in Death Valley, California and ending in Olympic National Park, Washington. His fine color slides presented beautiful scenes of: Joshua Tree National Monument; the 49'ers California Club's annual celebration including 2500 recreational vehicles in attendance; a Pancake Race -- all contributing to the historical atmosphere of the 1849 Gold Rush.

Then to Crater Lake, Oregon. On to the Olympic Peninsula in Washington, presented in two sections. (1). Seashores and Tidepools. (2). Rain Forests showing huge Douglas firs, the Pacific garter snake (there are no poisonous snakes there), huge snails, birds of the higher altitudes, flowers, mountain goats, waist-high ferns, black-tailed deer. Annual rainfall here is 150-160 inches. Alan's programs are always educational and inspiring.

YOU JUST SPENT ABOUT \$85.00 FOR WHAT? FOR FINE BOOKS FOR YOUR CACTUS LIBRARY. What do you members of T.C. & B.S. plan to DO about this investment? DO SOME THING such as check books out for serious reading and study? Congratulations! OR -- DO NOTHING? You believe in letting them become DUST-CATCHERS --\$85.00 worth of DUST-CATCHERS? There is one 3-volume set worth \$52.50 that you should not ignore! Following is a brief review of your new books:

- 1. "Epiphyllum Handbook", Scott E. Hazelton. \$3.95. Purpose: to help those with a newly acquired interest in the Epis to know their fascinating history, culture, propagation, differences and similarities, names and possibilities. It is one of the miracles of Nature how unpretentious branches of Epis can suddenly put forth huge buds that burst open into spectacular flowers at sundown.
- 2. "The Agave in Sonora", Agriculture Handbook No. 399. Howard Scott Gentry, Staff Botanist, Desert Botanical Garden. \$2.00. 190 pp. 1973. "In Sonora, agaves are scattered like gems in an arborescent matrix, mainly upon rocky slopes of hills and mountains, from sea level to 8000 feet. We need to know much more about the biotic relationship between agaves and the wide variety of animal life they help support." Includes Annotation of Species, Concept of Species, Uses of Agave and Yucca, Photos, Charts, Diagrams.
- 3. "Succulents and Cacti", Sunset Editorial Staff and Jack Kramer. Lane books. 1973 \$1.50. 79 pages, Lovely pictures. A book for the amateur cactus gardener. Landscaping ideas. Propagating techniques. Troubleshooting Plant Problems. A descriptive guide to favorite genera. How to graft cacti. Etc.
- 4. "Echeveria", Eric Walther. \$16.50. Good photos. Contents: Botanical History. Herbarium Collections and Field Work. Echeveria in Nature. Key to Series. Cultivation. Systematics. Now you can become an "Echeverist" par excellence.

- 5. "A Handbook of Succulent Plants", Vol.I, II, III, Herman Jacobsen, Curator of Botanic Garden, Kiel, Germany. \$52.50. Contents: Descriptions, Synonyms, and Cultural Details for Succulents Other Than Cactaceae. Short History of Succulent Plants. Their home, form, mode of life. Uses: Cultivation. Enumeration of Succulent Plant Families.
- 6. "The Book of Cacti and Other Succulents", Claude Chidamian. 1958. \$6.95. This lavishly conceived volume details the full story of succulents: what they are; how they began developing 50 million years ago; how they can be grown successfully indoors and out, by the home gardener. The amateur will profit from reading this one.

YOUR LIBRARY IS LOCATED AT 2754 NORTH CAMPBELL AVENUE, courtesty of Lois and Nancy Clarke. ---Book Reviews by C.C.C. Ed.

THE IMBALANCE OF NATURE AND WHAT WE CAN DO ABOUT IT Joseph F. Brick

It has always been a sad experience for me to find myself in the beautiful, open spaces of Arizona, and to witness in many areas, devastation of the desert flora in general and cacti in particular. In my opinion, most of this devastation and depletion is the result of an imbalance in nature; most of it caused by man.

However, it is this sad condition that prompted me to found the Pima Cactus Preservation Group, with its objective to preserve the native cacti of Arizona. Our approach is to raise cacti from seeds, and when they are mature enough to withstand the rigors of the outdoors, to plant them in selected areas, with the hope that they may be a source of study and pleasure for future generations. The early stages of this process have been accomplished in the past two years to the extent that we have raised hundreds of cacti seedlings, and with the indispensable cooperation of the U. S. Forest Service, these seedlings have been planted in federally owned lands under the protection of the Forest Service. Our observation of their progress to date, indicates satisfactory results.

As Neil Armstrong made his memorable "One Small Step on the Moon for Mankind", so may the Cactus Reforestation Project be the first small step to a great and successful effort as a joint undertaking by both the Pima Cactus Preservation Group and the Tucson Cactus and Botanical Society. With objective in mind, a sactus seedling plot has been established in the John Haag Memorial Garden at the Arizona-Sonora Desert Museum. This is for the purpose of observing and recording the progress and all other pertinent data of these seedling plants so that this compiled information can be applied to further improve their culture. This project has the enthusiastic support of the Tucson Cactus and Botanical Society, the Pima Cactus Preservation Group and the management of the Museum. Needless to say, the success of this worthy undertaking will depend very much upon the cooperation of both organizations.

John Galsworthy, the British novelist, wrote in his Swan Song: "If you do not think of your future, you will not have one." It is our hope that this project will be a commendable part of our future. It is both a challenge and an opportunity: the challenge, in simple terms, is an innovation; the opportunity, a privilege to return to this Earth at least in a small measure, something for that which we have taken from it.

In the long run of man's existence, his control of the ecology factor and his own continued existence on this Earth are essentially one and the same thing.

Otherwise both Nature and man will perish. May we remember that the dynamics of Nature are such that Nature belongs to everyone and everyone belongs to it.

Surely Joseph Brick and the Pima Cactus Preservation Group are to be congratulated on their concern and foresight leading to the studies of cactus reforestation. Not only will their findings be of importance in dealing with cactus, they will help in understanding the broader problem of how to live in harmony with nature and at the same time achieve an ever expanding quality of life.

Paul S. Henshaw Vice President TCBS

BILL PLUEMER'S CACTUS GARDENS

Bill Pluemer treated members of Tucson Cactus & Botanical Society to a distinct pleasure when he invited them to visit his beautiful cactus gardens and to see his potted cactus collections. Many of the "average" members hope that visits to cactus gardens of our more learned and more experienced members will become a regular item on our year's club calendar. They state that from each such visit they get many inspiring ideas for planting cacti in their own gardens. Also, they obtain excellent advice not otherwise available. Bill Pluemer's patio cactus garden and his well laid out cactus beds beyond the patio wall prove his artistic skill in applying many desert flora to landscaping his yard. His collection contains many fine specimen plants. His large Euphorbia obesa showed one member the great size this plant can attain. A hedgehog cactus with a nearly purple body captured the attention of another. His impressive mammillaria collection which he has collected from Baja and Mexico impressed everyone. The flowers and the rich buds on plants delighted all visitors. They agreed that Nature's "timing" for the April 1st Cactus Exhibit at Bill Pluemer's gardens was perfect. The entire landscape was aglow in glorious blossoms. Members of T.C. & B.S. fortunate enough to have attended, thank Bill Pluemer ever so much, and hope to be invited back another time.

15th biennial national convention of cactus and succulent society of america 1973

Tucson Cactus & Botanical Society members attending this Convention in Las Vegas, Nevada were: Delegates -- Kay Stehulka, Lois Clarke, Carl Horst, Nancy Clarke; Alternate Delegates -- Wanda Horst and Anne Christensen; other members - Col. and Mrs. W. M. Young, Harrison Yocum, Mr. and Mrs. Harry Yocum. The varied programs included talks as follows: "Native Cacti and Succulents of Nevada", Jose Mast, President of Las Vegas Cactus and Succulent Society. "Recent C.S.S.A. Shows and Exhibits in the Los Angeles Area", W. C. Lockwood, current president of C.S.S.A. "Whytheselongnames", Geoff A. Hedgecock, England. "Desert Succulents and Cacti of California", Warren McElroy. "The Mojavean and Navajoan Desert ", Dr. Lyman Benson. "Idria Happenings", Virginia Martin. "Tarahumara Country", Kathryn Sabo. "The Odyssey of Dr. George Engelmann", Dr. Larry Mitich. "Exciting, Exotic, Exuberant Echinocereus", W. H. Earle. And many more.

Kay Stehulka of T.C.B.S. attended for the first time, She reported it as a "very interesting experience". She liked: tours of 4 beautiful local cactus gardens; sales tables loaded with endless varieties of plants to

buy; coffee and punch served at all times; the evening banquet addressed by Nevada Governor Reid, field trips; a boat trip. All T.C. & B.S. members who want to know more on this subject should plan to attend the 1975 convention to be held in San Diego, California.

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"SUWARROW" IS HOW IT SOUNDS. The Report on the United States and Mexican Boundary Survey under direction of the Secretary of Interior by William H. Emory published in 1853 identifies the SAGUARO as "SUWARROW". This report is the story of the mapping of the Mexican-United States border as determined by the Gadsden Purchase. Emory was the official surveyor of this border in 1848. --contributed by Jack Lesson, history buff, of Gla-Jac Print Shop, printing CACTUS CAPITAL CHATTER for the 9th year.

CACTOPHILES ---- COMING AND GOING

Chester and Evangeline Scott have moved to Phoenix to make their home in a retirement suburb. Their new address is: 7550 North 16th Street, Apt. 208-2, Phoenix, Arizona. 85020

Mr. W. H. Earle of Desert Botanical Garden, Phoenix, kindly lent Cactus Capital Chatter a Photo of Mammillaria Nejapnesis to publish. It was judged best Mam in the Show, bringing our member, Alan Blackburn, a trophy. Our thanks to you, Mr. Earle.

"Cactus Pat" in Cactus Capital. U.S.A.: "Cactus Pat" (Mrs. C. P. Read) of Surrey, England, was a guest of Carl and Wanda Horst after the 1973 C.S.S.A. convention in Las Vegas, Nevada. She joined our C.S.S.A. in 1961 before she knew that England had a similar Society. She lectures there on cacti and the other succulents. Her plants are cultivated entirely in two greenhouses. Our sunshine, warm air and lack of humidity are the most appealing features of southwestern U.S.A. for her.

James Robbins of Sierra Vista, Arizona, is a former member of T.C. & B.S. He has always been a high winner in the Annual Cactus Show at Desert Botanical Garden, Phoenix. Again this year he won Sweepstakes Award for Leaf Succulents. He was Trophy Winner in Aloe and Collection of 5 Leaf Succulent classes. He won many, many 1st, 2nd, and 3rd Ribbon Awards in Section II, Succulents Other Than Cacti. Jim, Tucson sends you our hearty congratulations. We are missing you and John very much, since you moved to Sierra Vista.

Helen Roubicek, member of T.C. & B.S. has given ocotillo and saguaro seeds to a South American traveler to Tucson who chose these desert plants as her favorites. Dr. Leonor Poletto of the Public Health Service in Alvarez, Argentina, visited in Tucson this spring and found the Sonoran Desert captivating.

P.G. Nichols' Paintings on Exhibit. P. G. Nichols, a charter member of Tucson Cactus Club (as it was first called), worked diligently with his friend, "Cactus John" Haag, to found our organization. He remained active in it with his wife, Alta, until a short time ago. Health problems have grounded both of them, regretfully. We truly miss their attendance at our activities. P.G. has taken up oil painting, of desert themes mainly. He exhibited 18 of them at our annual 1973 Cactus Show. Nichols welcome their cactus friends calling to visit at 4471 North Pomona Drive.

PLEASE RETURN IT TO US. Whoever took home the copy of EXCELSA, Journal of the Aloe, Cactus & Succulent Society of Rhodesia please return it to me. This is a gift to us from our member--Lillian Fisher. It remains in our Library to be checked out by members wanting to read it. Return to Josephine Shelby.



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 IX

1973

No.4

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"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

AN ANNIVERSARY - THE 13TH

All of the Affiliate Societies of the Cactus and Succulent Society of America, Inc. have stories of their foundings, but sometimes the stories take on the human touch that is unforgettable. And such a story belongs to the Tucson Cactus & Botanical Society. Thirteen years ago at the home of "Cactus John" Haag, the Society was founded and he became the founder. "Cactus John" and his wife, like so many other people, came West because of health problems. But they loved the Desert as few people ever have. From the time they arrived in Tucson, they started collecting for their Cactus Garden. It became a well-known garden, and in 1957, after his wife's death, he named it in her memory -- "El Jardin Botanico de Santa Clara".

When the Society was formed, he gave in every way he could to make it a successful group. All these things were remembered when the first copy of the <u>CACTUS CAPITAL CHATTER</u> was published in 1965. The dedication read: "With sincere gratitude and deep appreciation, we dedicate this, our first edition, to the memory of John A. Haag." To his many friends and associates he was affectionately known as "Cactus John", and indeed he has been sorely missed.

One of the things he is most remembered for was his dedication to seeing that the Saguaro Forests of Arizona would never die. He gathered seed every year, and not only planted them himself, but passed packets of them around, wherever he might be. He really loved Arizona and its Saguaros. Shortly before his death in 1962, he attended an annual meeting of the Cactus and Succulent Society of America in Los Angeles. Every-Qne there received a packet of Saguaro seed, each packet stamped "Tucson Cactus and Botanical Society", and he gave as a door prize a Saguaro Plant three feet high, which was later shipped from Arizona to the Winner. The Tucson Society has also memorialized him by planting a cactus garden at Arizona-Sonora Desert Museum. Here, on May 7, 1965 with the convention members of the Cactus & Botanical Society of America in attendance, the Haag Memorial Garden was dedicated. Members of the Tucson Society still keep an eye on "his" Garden. And now the Tucson Society celebrates its 13th anniversary of founding and can be proud of what they have accomplished in the 13 years since "Cactus John" proposed to a group of enthusiasts that they start such a Society. May it and its members have

many more anniversaries among the Saguaros of Arizona. -- by Joyce Tate of Gates Cactus and Succulent Society, California, to whom we are truly crateful for this tribute. (Cactus Capital Chatter ed.)

EDITORIAL

It is a reasonable assumption that people belong to societies and organizations because they wish to participate in one way or another in the programs and activities offered. The Board of Directors of the Tucson Cactus and Botanical Society has reviewed objectives of the Society as set forth in the Bylaws, and it has considered what appear to be existent needs and opportunities. Accordingly, 13 new, working committees have been presented to the entire membership. Each of the 125 members of the Society has been asked to make known to Paul Henshaw, his 2 favorite choices for active work on these committees. This work should be a pleasure, not a burden. It is suggested that members accept only those work assignments that bring pride and satisfaction to them.

There has been a fine response to this proposal for new committees - especially in the areas having to do with the handling of cacti (classes, sales, auctions, landscaping, seedlings, reforestation). There is interest in organization, promotion and management work also, but such activities are specialized and call for more individualized effort (legislation, news column, tours, speakers bureau, evening programs, landscaping). The acid test takes place after committees are permanently staffed and their work proceeds. Translating the functions of the 13 committees into action, plus achieving their specific goals will not need to be shouted from the housetops. An enlivened, achieving, and progressing club membership can be impressive and convincing through ACTION that yields desired RESULTS. Cactophiles of Tucson Cactus and Botanical Society -- all 125 of you -- this is the opportunity that you have cried for! WHAT ARE YOU GOING TO DO ABOUT

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- 1 9 7 4 MEMBERSHIP ROSTER All T.C. & B.S. members desiring to help ease the tedious work on their 1974 Membership Roster, and get their names in it, bringing it out in January 1974, can do a generous thing by:
 1. Mailing their 1974 dues NOW, to Mrs. Lois Clarke, 3315 Treat Circle,
 - 85716. Tucson

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- Handing their dues to her at our remaining 1973 meetings. PLEASE MAKE CHECKS PAYABLE TO: Tucson Cactus & Botanical Society. Thanks so. much for your consideration and cooperation. 0000000000000
- 1973 ANNUAL REPORT OF CACTUS CAPITAL CHATTER 4 quarterly issues of 8 pages each were published. 340 copies were mailed to Tucson and Green Valley addresses. Subscriptions were mailed to individuals in 6 states outside of Arizona. Copies were mailed to many addresses in Europe, New Zealand, Australia, Africa, Japan. Editor compiled, published and mailed the 1973 T.C. & B.S. Membership Roster. Also, we handled the printing and mailing of 2 sets of brochures relating to New Working Committees of the Society. We presented at our 1973 Cactus Show an inclusive exhibit of the various newsletters that we receive regularly, in exchange, from other cactus societies.

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? ? ? WHY ? ? ?

By R. R. HUMPHREY, Ph.D. Professor Emeritus, The University of Arizona

SOUTH ALONG THE SONORA COAST of the Sea of Cortez, about six miles from the remote fishing village of Puerto Libertad, the coastal plain is interrupted by some no-longer-active sand dunes that extend to the water's edge. These wind-blown sands support one of the finest stands of the giant cardon cactus to be found on the Mexican mainland. A mile further south lies Punta Cirio where one of nature's anomalies, the boojum makes its home.

The ever-active ospreys are an intimate part of the whole scene, diving for fish in the waters of the nearby gulf and nesting and raising their families in the cardons and boojums but particularly in the cardons.

This is an area that has long been known to scientists as the only place in the world, except for Baja California across the gulf, where the boojum finds conditions to its liking and, as a consequence, grows naturally. The rugged mountains also provide an ideal habitat for such unlike natives of the desert as bighorn sheep and desert diamond-backs while the sand dunes support a few of the diamond-backs but many more of the hard-to-see and dangerous sidewinders.

The remoteness of the place and the deeply-rutted, soft sandy road across the dunes have discouraged many from visiting the area. Those who do make it across the soft sand all too often leave the evidence of their visit in the form of cans, bottles and paper strewn about the camp sites

My wife, Roberta, and I have been visiting Punta Cirio off and on since our first trip there in a Model-A Ford in 1930, 42 years ago. Almost without fail we have had to clean up after other visitors, usually Americans, but sometimes Mexicans. One can tell by the labels of the cans and bottles the nationality of those who have been there before you.

This pollution is, of course, inexcusable, and always seems to us a crime against a beautiful location and a beautiful campsite. It can, however, be corrected with a little work and we are glad to do the necessary cleanup job although it always leaves us with a feeling of disgust at the pigs that some people can be. And this brings us to the reason for this bit of writing.

Where the two tracks of the primitive road start across

the sand dunes a giant cardon has stood immediately adjacent to the road for perhaps 200 to 300 years. When we first saw this in 1930 we were impressed and even awed, in part by the size of the plant, but even more by an enormous osprey nest balanced precariously on the top of one of its tallest branches. During the years since 1930 we have revisited the area more than 20 times, always noting and often commenting on the vigor of the old cardon and the industry of the osprey families that persisted in maintaining the nest in a state of repair.

The entire region is exposed to strong winds from the gulf, sometimes of hurricane force during the tropical storms and chubascos that originate far south in the Pacific. At times these have been highly destructive of the nest so that a very considerable pile of sticks, old bones and other material had gradually built up around the base of the cardon.

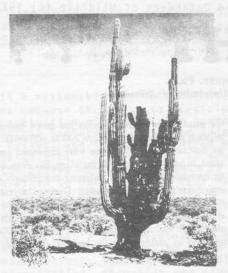
When we were in the area early in August of this year (1972) the cardon was standing as usual, one osprey visible over the edge of the nest and another flying nearby. As usual they were talking in typical osprey fashion, and we assumed there were either eggs or fledglings in the nest.

We returned early the next month to carry on our research and were shocked to find that someone had touched a match to the accumulation at the base of the plant, killing the cardon and burning up the nest and, obviously, any young birds or eggs it may have contained.

We could hardly believe what our eyes told us as fact and even now, months later, we find it hard to realize that the old landmark and the birds we had come to know so well are gone, destroyed by the wanton act of some stupid fool. Surely, if there were a literal hell, it would contain a special chamber of horrors reserved for the select few barbarians who, solely from a perverted sense of enjoyment, destroy and murder defenseless creatures such as these.

We saw the site again in early October, and the dead cardon is now falling to pieces, the heavy rotting branches falling away. The birds, of course, are gone and to the is the special beauty and charm of the place and the birds ing of empathy we have always had for it.

*See Photo "The Cardon after burning etc."



The cardon after burning. A month later the main branches were beginning to fall off.

"THE BOOJUM AND ITS PLANT NEIGHBORS IN CENTRAL BAJA"

was the subject of a most interesting and informative program for the October meeting of our Society. Dr. Robert R. Humphrey of the Department of Biosciences, the University of Arizona, talked about his studies there and showed slides to illustrate the fascinating plant life of Central Baja. He announced that, due to his great concern about saving this area from the inroads of oncoming "progress", he is urging the Mexican government to establish national parks in the cipio apeas near Libertad, Sonora, and in central Baja. The response is most encouraging, he reports. Also, an international park in the Pinacate Area along the United States - Mexico boundary is being seriously discussed, between the two countries, due to Dr. Humphrey's dedicated conservation efforts.

MEET NANCY CLARKE

Nancy Clarke belongs to the dedicated cactophile minority of Tucson Cactus and Botanical Society. She began to collect cacti in 1959 after she received a gift of an echinopsis. She joined this society in 1966 and became its secre-



tary in 1967. In 1970 she was elected its first woman president. During that year, our cactus club presented its first annual public cactus show which was very successful. She is a current member of the Board of Directors. Her cactus collection numbers 2000 plants consisting of 600 species. They are housed in her combination lath house and plastic greenhouse, and most of the plants are in pots. In the potting room, Nancy always has 7 or 8 plastic-covered pots to watch, for seeds sprouting. She uses grafts and plants cuttings in order to increase her collection. She has displayed many of her plants during various cactus shows at Desert Botanical Garden, Papago Park, in Phoenix, and has won many high ribbon awards. She exhibited specimen plants in attractive pots, with white crushed

rock covering the soil. By the way, Nancy is generous with her seedlings. Her collection is worth seeing. She has attended three national conventions of the Cactus and Succulent Society of America, in El Paso, Pasadena and Las Vegas. For a time, she wrote a column on the cacti in a Tucson mobile park publication. Tucson Cactus and Botanical Society is indebted to her for giving space in her business office suite of rooms to house their small library. She watches over it, whether as an officially appointed librarian or otherwise.

----Betty Blackburn.

JOSEPHINE SHELBY AWARDED CACTUS SOCIETY'S SECOND LIFETIME HONORARY MEMBERSHIP

In 1967, the Tucson Cactus & Botanical Society honored its member, Mr. P. G. Nichols, with a Lifetime Honorary Family Membership. Josephine Shelby, a native Arizonan and a charter member of our Society, was honored in 1973 with a Lifetime Honorary Membership. Josephine, a graduate of the University of Arizona and a high school teacher for fourteen years in Arizona, has been editor of CACTUS CAPITAL CHATTER since 1966. Her late husband, Ward Shelby, was editor and publisher of a state-wide magazine, "Progressive Arizona", that preceded "Arizona Highways" magazine. Last year she was appointed Affiliate Director and Historian of our Society. Josephine as an avid conservationist has for several years travelled to state meetings and workshops of the Advisory Commission on Arizona Environment, as a representative of our Cactus Society. During the seven years that she has been editor of our publication, Josephine has -- without compensation -- spent countless hours and driven many miles in order to edit our newsletter which is read all over the United States and in many foreign countries.

We, as club members, are happy for her. We wish her success in her many interests.

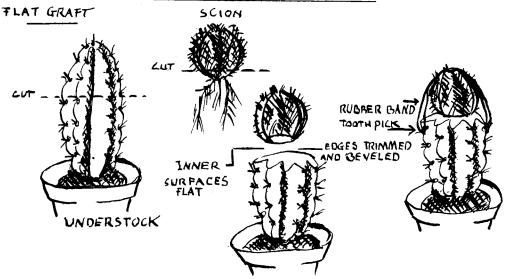
Editors note: My sincere thanks to Tucson Cactus & Botanical Society.
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ALAN BLACKBURN HONORED BY THE ARIZONA - SONORA DESERT MUSEUM. A reclining statue of George L. Mountain Lion, Research Associate in Human Behavior at the Arizona - Sonora Desert Museum, was awarded to Alan Blackburn upon his retirement from there on September 30, 1972. Sheridan Oman's handsome bronze became the first award of this kind to retirees from world-famous Desert Museum. "The Desert Speaks", a publication of the Desert Museum, tells of Alan's having given George L. Mountain Lion his name. Alan began his association with this living museum of the Sonoran Desert on January 5, 1953. He supervised construction of its Watershed Diarama and Water Street. He helped build the first circular birdcages and the walk-in ones also, welding being one of his basic building skills. He did the planting over the top of the Tunnel, and much of the cactus planting over the grounds of the Museum. Alan became acquainted with "Cactus John" Haag at Desert Museum and was active in the group that founded Tucson Cactus Club (its original name) in November 1960. He was elected its founding Vice President and President in 1966. We wish for him and Betty many happy years of actively following their varied interests.



CACTUS AUCTION!!! IT'S A RIOT!!! WANT SOME CACTUS? BUY IT!! BUY IT!!
(Cartoon from 1973 Calendar of Hamilton Branch of Cactus & Succulent Society of N.Z.) T.C. & B.S. meeting on November 11 will be a Plant Auction.

WE LEARN TO GRAFT AT BLACKBURNS



NEEDED EQUIPMENT
CLIPPERS TO CUT HEAVY STOCK AND SCIONS.
TONGS TO HANDLE SPINY SPECIMENS
RUBBER BANDS.. TOOTHPICKS
SPINELESS OPUNTIA PADS TO CLEAN KNIFE.
VERY SHARP STAINLESS-STEEL KNIFE.
THE BEST TIME FOR GRAFTING IS SPRING OR
SUMMER WHEN BOTH STOCK AND SCION ARE IN GOOD
GROWING CONDITION. STOCK AND SCION MUST BE OF

GRAFTING CONSISTS OF PLACING THE CUT SURFACE OF ONE PLANT ON THAT OF ANOTHER SO THAT THE TWO CUT SECTIONS CAN UNITE AND GROW AS ONE PLANT. IT IS USUAL TO PUT A SLOW GROWING SPECIES ONTO A STRONG QUICKER-GROWING STOCK IN ORDER TO RAISE A LARGER PLANT MORE SPEEDILY.

STAB GRAFT

ZYGOCACTUS

FOR UNDERSTOCK WE USED 'TRICHOCERUS' WHICH ALAN HAD CUT INTO SHORT LENGTHS. WE BURNED OFF AND CAREFULLY BRUSHED OFF THE SPINES. FOR THE 'SCION' WE USED 'GYMNOCALYCIUM'. WE RAN OUR SHARP KNIFE THRO THE PAD OF A SPINELESS PRICKLY PEAR TO STERILIZE AND THEM QUICKLY THRO THE CURVED SECTION OF THE STOCK, TRIMMING AND BEVELING. WE INSERTED TOOTH-PICKS AT RIGHT ANGLES IN THE STOCK. THEN AGAIN, WE MADE A VERY THIN SLICE THRO. THEMEDIATELY WE CUT THRO THE SCION, MATCHING THE CORRESPONDING SURFACE RINGS WE UNITED THE TWO HOLDING THEM FAST WITH RUBBERBANDS ANCHORED TO THE TOOTHPICKS, SHOULD THE SCION SEEM SOFT, A SMALL CARDBOARD 'HAT' KEEPS IT FROM BEING CRUSHED. THE BANDS SHOULD REMAIN 'ON' FOR ABOUT TWO WEEKS.

STAB GRAFTING OF THE CHRISTMAS CACTUS WAS A SOMEWHAT DIFFERENT METHOD.

CARE MUST BE TAKEN NOT TO PIERCE THRO THE STOCK.

- TOO 70 // Leveling



WE LEARN ABOUT CACTUS SEEDS 9/29/73

No , it is not the cross section of a pineapple. It is actual size of a barrel cactus seed pod.

Alan Blackburn and Joe Brick demonstrated cacti seed planting. Their two ways of proceedure differed slightly.

Both agreed that the seeds must be well washed and the sticky mammallaria seeds must be sieved and dried.

Soil mix: 36 parts to mix: 27 parts garden soil
6 parts sharp sand
2 parts peat (mulch)
1 part charcoal

Twenty four hours before planting seeds, moisten soil ,or rather SATURATE to which has been added Chlorox (1 t. to a pt. of water). Or, the soil can be put into a 200' oven for 1/2 hour; the soil must be wet when put into oven.

Next day lay seeds in container. Joe uses two inch aluminum pans, holes punched in bottom so the burr is on the inside. Alan uses plastic bread boxes (perfect little greenh ouses). Cover lightly with f ine soil or vermisulite. Cover with celophane. Don't water until seedlings get going, then punch holes here and there to acclimate. Do not put in direct light. When seedlings touch cellophane transfer to coldframe and, at that time use second dose of Chlorox.

Joe does not use a fertilizer, Alan suggests Bl and Marvel Plant Food. - DOROTHY LEVERING

A REPORT OF THE AFFILIATE DIRECTOR OF TUCSON CACTUS AND BOTANICAL SOCIETY Can you identify the: German Federal Republic? German Democratic Republic? Do you recognize: Praha? Plzen? Brno? Maldegem? Cactophiles living in all these cities in Europe have become well informed about Tucson, Arizona, USA, the Cactus Capital, located in the midst of the beautiful Sonoran Desert of North America. They write to us about their devotion to the study and culture of cacti. They say that they are sure that we realize how very privileged we are -- being able to live in the midst of the habitats of many native cacti. Can it be at all possible that many of us take our cacti for granted? There is that old adage that says: "Familiarity breeds contempt."

Your TC&BS is affiliated with the National C.S.S.A. The National circulates world-wide the names and addresses of all its U.S. affiliated cactus and succulent societies. In this way, Tucson becomes known on every continent of the earth. Through your Affiliate activity and CACTUS CAPITAL CHATTER you maintain contacts with cactus societies and individual cactophiles in New Zealand, Australia, Japan, South America, Africa, Europe. Your newsletter is mailed regularly to them. In turn, we receive theirs.

help.

Your Affiliate Director lately was able to send an excellent collection of seeds of some of the rare cacti of Baja and Mexico to a German cactophile, Gerhard Kaiser. His special interest is raising cacti from seeds in order to study growth from seedlings into maturity. Our member, Bill Pluemer, gave seeds from his fine plants to Gerhard Kaiser whose letter of acknowledgment and gratitude follows:

Dorfplatz German Democratic Republić September 12, 1973

Dear Mr. Pluemer:

The post officer smiled, when he was giving me your present. He knew how I was waiting! After work I had my pleasure to open the parcel and to see the seeds. I must say there was a big surprise for me. Such a lot of rare species! I am happy. You know how rare the most of them have been in Europe, didn't you? I've never seen a Mam, hutchisoniana, and Mam, lenta, wrightii, capensis, are also very rare in our collections, and so are the others. You have given me a wonderful and precious present. In your last letter you ask me if I want several more species. Of course I do! 20-30 corns are enough. So I can do experiments with the seedlings, and I can also do some plants in my collection. If the portions are bigger, I can give such rare plants to my cactus friends. That isn't bad, too. Now I want to say you many, many thanks for your wonderful

I can tell you: the seeds are coming!! Yesterday I get your wonderful parcel.

On the next weekend I must give Mr. Brick's seedlings another box. They are going big and bigger. It's a splendour! One of the Carnegias has two heads, an interesting fact. All of them have wonderful spines. It's a pleasure for me to watch these little Arizona cacti. Another question: Why are some of your native cacti so rare in Europe? I can't think that they are uninteresting for many cactifans here. It must be another thing. Are they rare on their stand? Is the cultivation so difficult that they are dead in a short time? In Europe and especially in Germany you can't find many of them.

Now I want to end my letter to you. I send you some slides as a little present for you. They are plants from my own collection. Most of them I had grown myself, from seeds, and it is a happy moment to see their flowers one day. That's the true happy in our hobby, I mean!

Your cactus friend Gerhard Kaiser

Editorial comment: "
It is indeed refreshing to know that in today's world, where people now talk in terms of millions of dollars, etc., etc., that a tiny thing such as a few seeds can bring such joy!" (P.)

HISTORIAN: Dorothy Levering reports that she has kept the 1973 Scrapbook upto-date. She has exhibited it at many 1973 meetings to allow members to read and study it. Various members generously contribute color photos of our programs and activities to this record. Publicity about our Society has been noticeably lacking in 1973 Tucson newspapers. Our members, Mr. & Mrs. W. J. Dougherty, editors of Green Valley News, give generous space in their publication, to our programs and activities. We are most grateful to them for this. Our Scrapbook is filled with their reports from Green Valley News.

MARY CHURCH'S SHOW-AND-TELL talk at our October meeting was immensely popular. This is one of the program favored throughout the membership.. They want more of such specific information on cacti and the other succulents presented at every monthly meeting.