

Floyd Werner

3216 N. Jackson

Tucson , AZ 85719

176

TUCSON CACTUS AND SUCCULENT SOCIETY

Jan 25 1988

JANUARY 1988 MEETING

SUNDAY, JANUARY 10, 2:00 P.M.

TUCSON BOTANICAL GARDENS, EDUCATION BUILDING

PROGRAM: "Open Forum". Several members will discuss their favorite genus. A question and answer period will follow each speaker.

MINI-SHOW: This is a new feature, which we hope will get our members to share their favorite plants. This month we will do the genus Echinocereus. This genus is extremely variable and ranges from miniatures to giants. We look forward to seeing many different species. The first three places will receive prizes. Remember, you can't win if you don't play. Here are the Rules:

1. No more than 3 total entries per person.
2. No more than one entry per species per person.
3. All plants must be potted.
4. Decision of the judges (membership vote) is final.

IN SEARCH OF: Thanks to Sue Smith for her work last year as Membership Chairman, but she is taking a break this year so we need a replacement. Think about it. I will ask for volunteers at the meeting and draft will start after.

DUES: Dues are due for calendar 1988, \$10.00 for a single membership, \$15.00 for family. Larry wasn't able to make the last meeting and several members wanted to pay then, so please bring check, cash or money order (no credit cards) to the meeting. If you are unable to pay your dues in person, you may mail them to: Larry Romo, 5400 W. Nebraska, Tucson 85746.

COMING ACTIVITIES:

SUNDAY, JANUARY 17: There will be a "potting up" party to provide us with plants for the Spring Show and Sale. We will meet at Bach's Cactus Nursery, 8602 N. Thornydale, from 2:00 to 4:00 P.M. This is open to anyone interested in repotting and caring for some plants until the show (there may be a few extras for those participating). This is informal, so stop by even if only for an hour. We can use your help and this will be a good opportunity for us to share our experiences.

PHOENIX CACTUS AND SUCCULENT SHOW: Coming up in late Feb. or early March at the Desert Botanical Gardens. All TCSS members, novice and "old" pro, should ready one or two plants to show our support for this fine show. Your Pres and V-P will be showing, so contact them if interested. A good response will lead to a club trip to Phoenix to critique the show.

Cereusly,

John Gaston, by F. Werner

MINUTES OF THE MAY MEETING: Tony Burgess, the Coordinator of the Desert Laboratory, gave an insightful look into the workings of the lab. and an overview of the ecology of *Carnegie gigantea*, the giant saguaro, and its relationships with other plants. He also presented a slide show of populations of saguaros, their changes over the years and the climatic requirements of cactus-like plants.

A: The Desert Laboratory was founded by McDougall at Tumamoc Hill Reserve. The Reserve is owned by the U of A and run by both the U of A and the U.S.G.S. The reserve was fenced to prevent cattle grazing in 1907. Originally 20 - 10 meter X 10 meter plots were staked and the existing plants on them were cataloged. Of the 20 original plots, the locations of only 12 remain known. This makes these the oldest plots observed and recorded in this manner in the world. The conclusion at this point is that the old theory of an undisturbed desert area reaching a static equilibrium is wrong. The in order for the desert to maintain its diversity it must have periods of drought, intense heat, cold, and occasional adequate water. These and other factors, in different combinations, select for different species of plants and animals. Some populations rise in numbers while others fall, eventually to rise again.

B: *Carnegie gigantea*, the giant saguaro, is the most northern ceroid (tall growing) cactus. This seems to be because of its relative cold hardiness and multiple pollinators. It was originally thought that the main pollinators of the saguaro were bats. However, the saguaro produces nectar not only at night, but during the day, when its flowers visited by several birds, bees, and other insects. In order for a saguaro to survive from seed it needs a series of specific occurrences to take place.

1. The year before the seed germinates there must be a killing drought to lower the rodent population.
2. The seed must germinate in a niche where it will not be subject to intense exposure by heat, cold, or being eaten. The seedlings often use a "nurse plant" such as a palo verde tree to provide this protection. (When the saguaro matures, its ability to take up moisture quickly often leads to the death of the nurse plant.)
3. The summer the seed is produced there must be rainfall every 7-10 days to keep the seedling from desiccating.
4. The following winter must be mild without a killing frost.

A saguaro that reaches maturity will produce 3000 seeds per year, 1/2 of a million seeds in a lifetime. Of these seeds only a few will make it to maturity. From photographs taken of portions of the Saguaro National Monument in the early 1900s by Ray Turner, the rise and fall of saguaro populations was apparent. When the mature saguaros cause the death of nurse plants or overgrazing removes the niches for seedling saguaros, and the aged saguaros eventually die, the area becomes virtually void of saguaros until the trees return and the cycle begins again. It is thought that the tree/saguaro cycle takes from 150-400 years. Although no study

has been done that long.

C: A statistical study of the occurrence of cacti and cactus-like plants seems to show that while they do come from deserts, the areas are cooler than average in the summer, warmer than average in the winter, and not subject to terrible droughts.

D: A project for members of the club.

The occurrence of plants in the Sonoran Desert needs more study than it will receive with the funding available. Individual citizens making careful notes about the presence of species of plants and the animals associated with them, the time of year, and location these observations were made can prove invaluable, particularly in the Tucson area. Many areas in and around Tucson have not been studied adequately and with development, what originally grew there will never be recorded. With observations such as these the complexities of the desert will become closer to being understood.

ARID LANDS GREENHOUSES offers a 20% discount to club members. Many thanks to Chuck Hansen.

Thanks to Dan Bach of Bach's Cactus Nursery, Inc. for the plants provided for the sale.

TREASURERS REPORT The club raised \$1514.95 from the sale, not counting \$102.00 from Dan Burt. The current balance in savings(?) is 4662.36.

GWEN FOLSOM 4871 E AV DEL CAZADOR TUCSON 85718 577-9249
GLEN H. AND MARY A. MILLER 5660 N. PLACITA PARDAL TUCSON 85718
797-3370
LINDA RYAN 6610 SUTHERLAND RIDGE PL TUCSON 85718 299-2338
JEFF & J. R. TREVAS 4541 N PLACITA SHELLEY TUCSON 85718 577-2251
JIM WORRALL 1621 E BIG ROCK RD TUCSON 85718 797-0819

MARY CHURCH 1090 E GRANT RD TUCSON 85719 624-7976
AL GUHL 1712 E BLACKLIDGE DR TUCSON 85719
KIM JOYIENS 4030 PASEO DE LOS RANCHEROS TUCSON 85719 743-7178
NATALIE MCGEE 2509 N CAMPBELL AV SUITE 275 TUCSON 85719 795-3994
JERI OGDEN 757 E NAVAJO ROAD TUCSON 85719 292-2965
ROY E. SOZA FAMILY 3830 N VINE TUCSON 85719 881-0832
ELANA ROSE SUMMERS 2255 E CALLE ALTA VISTA TUCSON 85719 323-7145
FLOYD WERNER 3216 N JACKSON TUCSON 85719 325-7228

JEANNEE BRAVE 9810 E CELESTE DRIVE TUCSON 85730 721-2361
BILL & V. K. LOWY 7631 E FAYETTE TUCSON 85730 747-8792
STEVEN YAPLE 10650 E PANTANO TRAIL TUCSON 85730

MARTIN SAX AND ELLEN FESSLER P.O. BOX 18313 TUCSON 85731 885-1045
CEDRIC AND SALLY WILLIAMS P O BOX 17283 TUCSON 85731

MICHAEL AND MAUREN DAVID P O BOX 57202 TUCSON 85732 296-0122
DEVON SHROPSHIRE BOX 42195 TMC TUCSON 85733 326-8294

TY & LOLITA MAHER SASABE STAR RT BOX 605 TUCSON 85736
ROBERT WEBB & TONI YOCUM HCR BOX 496 TUCSON 85736 822-1059

PAT GOLTZ BOX 36508 TUCSON 85740

BARBARA ANN BIRT KILE 9106 N EAGLESTONE LOOP TUCSON 85741
744-9370

DICK BUCHROEDER 8 S. BELLA VISTA DRIVE TUCSON 85745 8849800
MARY E. HENDERSON 3333 W. ANKLAM ROAD TUCSON 85745
SARA W. PERPER 6700 W CAMINO DEL CERRO TUCSON 85745
LOLETA SCHACHT 3003 W BROADWAY NO 25 TUCSON 85745 622-1152
MARGARET G. WOOD 3500 N ARROYO LANE TUCSON 85745

CHARLES L. HANSON 3560 W BILBY ROAD TUCSON 85746 883-9404

BOB ELLIS FAMILY 7821 S CAMINO LOMA ALTA TUCSON 85747 1-647-3668

CINDY KUEHN 10017 E ERIC ALAN PL TUCSON 85748 885-1024
DEBRA SHEPHERD 9617 E BARRUDEAU HILLS TUCSON 85748

DAVID MCGOWEN 2440 N TANQUE VERDE ACRES DR TUCSON 85749 749-0994
BOB & DOLORES SCHLEGEL 2460 N TANQUE VERDE ACRES DR TUCSON 85749
749-3568

JACK SEGURSON RT 18 BOX 711P TUCSON 85749
MARY STRICKER 3831 N CHERRY CREEK PL TUCSON 85749
Respectfully submitted,

Floyd Werner, Secy.

