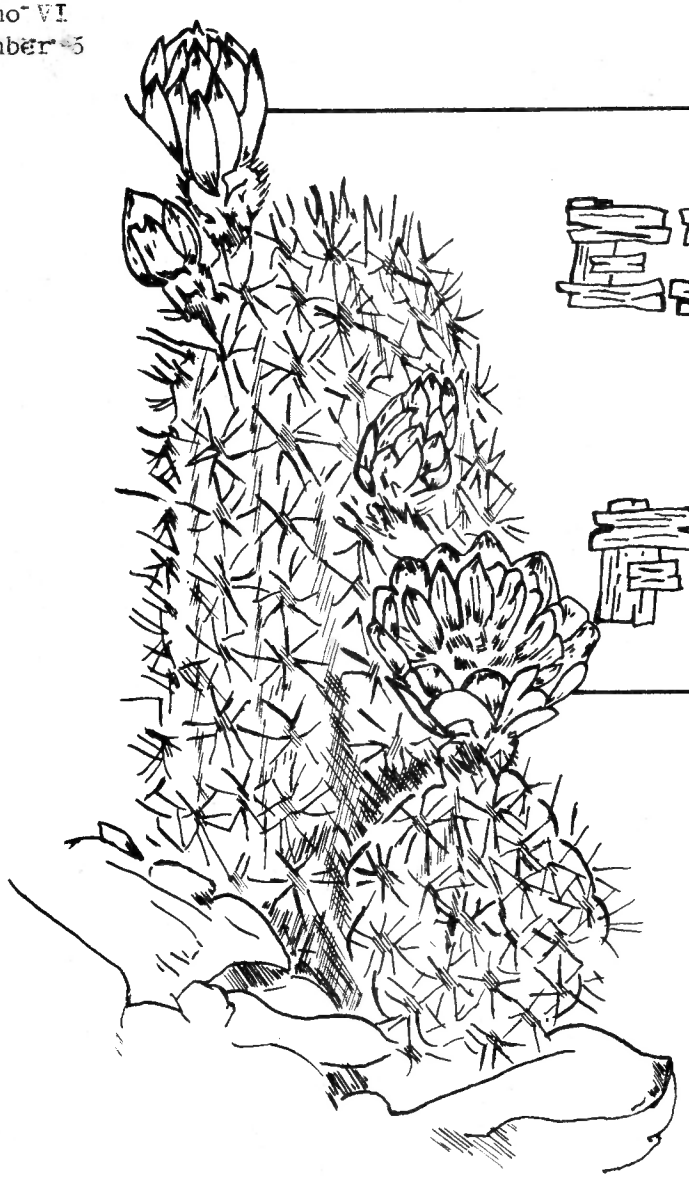
Tomo VI
Number 5

June 1971



ESPINAS Y FLORES

KEEP THE FAITH

by Jim Stalsonburg

One might think that celestial bodies were created in the heavens to project the ever presence of the sublime. Untouched, unmarred by earthly progress each night, these envoys of elegance light the universe with their gentle smile. By their presence we are reminded that Nature never wears a contemptuous expression.

When we speak of Nature in this manner, we are doing so with a purely poetic frame of reference. It is to distinguish the timber of the lumberman from the tree of the poet; all objects of nature should be viewed as to the purity and completeness expressed relevant to the whole. The beautiful country landscape, that was our pleasure to pass through this morning, was comprised of five or ten portions of property. Each was owned by some individual, yet no one of these individuals owned the landscape. The true owner is the person whose eye can unite all the diverse parts. It was written that the genuine lover of Nature is the person who has his inward and outward senses truly adjusted to each other.

Everywhere one goes, from the heart of the city to the depths of the forest, he is constantly reminded of his link with civilization. For the earth-bound mortal it is practically impossible to escape the evidence that someone has proceeded him to this place. If a man need truly to be alone, let him look to the stars. For whereever man has tread, the naturalness left behind will never be the same.

The inward and outward senses are in continual readjustment. The flowers of the field, the animals of the woodland, the mountains lofty against the sky will ever reflect the keenness of his finest hour, but never more will he fully envision them with the pure simplictic delight of his childhood.

(Continued on page 2)

(KEEP THE FAITH continued) In the recent past various people have unleashed unreasoned attacks on horticulturalist and agriculturalist alike for their use of man-made materials. It is their insistence that we restore the Balance of Nature. To the uninformed this may sound most desirable, but for all intent and purpose it is impossible. When this land was an uninhabited wilderness, Nature may have been "in balance", but since the intrusion of man, the balance has been upset forever.

With 200 million people to feed each day in these United States effective pest control is absolutely essential. Scientists have been working on biological controls for over 75 years, and outside of a very few isolated instances the results have been ineffectual. To say nothing of the tremendous cost to the individual to implement these techniques.

Pests of all kinds proliferate commensurate to their food source, and with crop fields in high and continuous production the supply is abundant. The Department of Agriculture estimated some increased food cost if the use of pesticides were to be discontinued immediately -- sweet corn and green beans would increase over 100% per can, milk over 33% per quart, and a bag of apples selling for 69¢ today would be $2.00. These figures are an excerpt from an article titled "Insects and Weeds Race Americans to the Dinner Table", NAC News and Pesticide Review.

Application of the knowledge given to us from agriculture, science, and chemistry has raised our standard of living and provided people all over the world with a better diet, healthier environment and more esthetic enjoyment.

Despite the undeniable value of pesticides to mankind, the effects of some and the misuse of others have extended far beyond the desired control. This extension has been harmful to our environment and in some instances, possibly, has caused irreversible damage. But in the same light, we can be fairly certain that the Wright brothers did not regard their winged blessing as the means to carry 300 people to their deaths. The creative mind tends to think toward the positive, not the negative.

MEANWHILE the search goes on with the environmental watchdogs barking at our heels and millions of dollars and countless hours of research by private industry. Someday, hopefully, we will find the material that will control everything and be harmful to nothing. But more readily, to find materials non-persistent in soils and non-injurious to man and his dominion. Until then, until the "perfect" pesticides are found, we must learn to live with chemicals that are potential killers.

JS

SPECIAL ANNOUNCEMENT of a SPECIAL CACTIVITY !!!!!

June 12th - Saturday

Time to meet 0800 hours which is eight o'clock in the morning and not half an our later. Remember, 8: a.m. in the parking lot behind the Organ Pavilian and behind the Floral Building in Balboa Park.

Cactivities Chairman ED MILLER will be the Man-of-the-Day and our Leader. He has arranged a trip to Huntington Gardens near Pasadena for our pleasure. We will stop first at Desert Nursery (bring your purse & give yourself a treat) for charmingly exhibited wellgrown C&S. It is suggested that you bring a simple nosebag lunch, then feast your eyes at Huntington Gardens -- dinner somewhere on the way home which we won't be early. Ed says the ONLY TRUE RESERVATION IS A PAID RESERVATION - $4.25 -- pay him at the meeting or check to 2117 Bluebird St SD 92114.

SPINE STUDIES

PELECYPHORA ASELLIFORMIS (Ehrenburg, 1843)

By Anthony D'Attilio

This small cactus is native to New Mexico and is the type of the genus. It is very distinctive in its form and it is rather pretty.

Two additional species Pseudopectinata (Backeberg 1935) and Valdeziana (Moll. 1938) have been at times considered also in the genus Pelecyphora. However, Valdeziana has been placed in its own genus and is now Normanbokea valdeziana. The generic position of Pseudopectinata has been thrown into doubt in a paper by Charles Glass (Cactus and Succulent Journal No. 6, Nov-Dec. 1969). This would leave P. asseliformis by itself. Its several distinctive characteristics make it nonetheless easily identifiable.

The name "Pelecyphora" comes from the Greek and means "hatchet bearer" with reference to the flattened tubercles (Fig. a). Asseliformis means "like a wood louse", a suggestive term for the form of the spine cluster. (Fig. b)

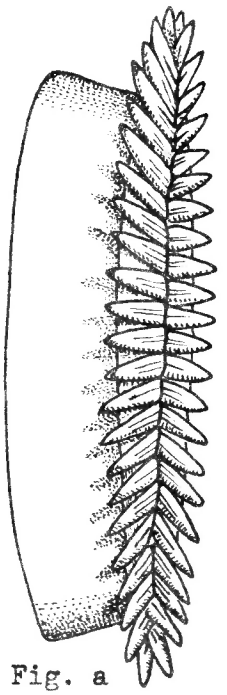


Fig. a

A more notable similarity, I find, is to the small mealy bug which as a cactus pest is so familiar to all of us. The plant bodies are small, forming offsets (caespitose) and are roundish or elongatedly round. The tubercles are not arranged on ribs, are flattened above, and crowned with an ovate areole bearing spines which are arranged comb-like.

At first the new tubercles are tightly squeezed together, later becoming more spread apart when their shape is easily discernible. Each elongated areole contains 24 to 30 tiny, blunt, flattened-down spines on each side.

The spines are coated with a fine semi-opaque greenish-white epidermis when new but this wears off and the older spines appear more green and translucent. Each spine has one or two grooves (Fig. c). The wool in the newer flower bearing areoles at the top of the plant is translucent and flattened, ribbon like. This is apparent only under magnification.

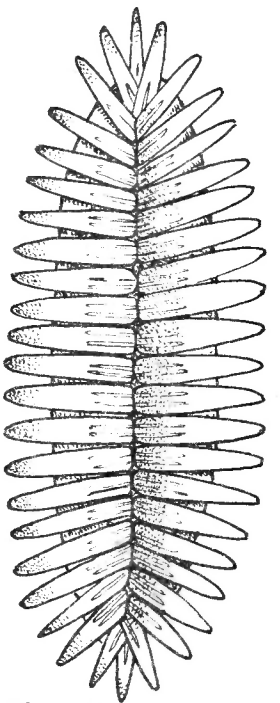


Fig. b

Both Britton and Rose in "The Cactaceae" and H. Bravo in "Las Cactaceas de Mexico", in 1937, believed that P. asseliformis was the plant known to the Indians as "peyote". The true peyote apparently is Lophophora Williamsii, a flattened, soft-bodied, almost spineless cactus that is widely distributed and not of rare occurence.

It is unlawful to possess it in California because of its use as an hallucination producing substance due to the chemical composition of its alkaloids.

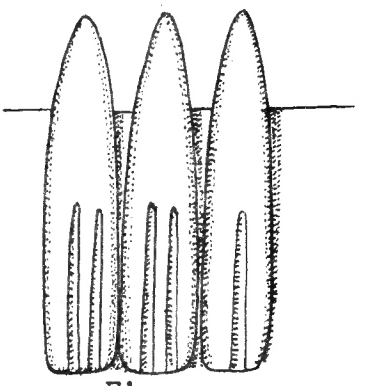
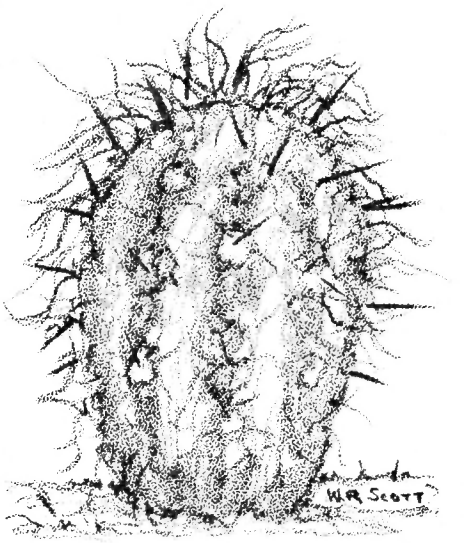


Fig. c

OREOCEREUS CELSIANUS

Cactus-of-the-month
"Mountain cactus"
--By Floyd L. Gable--



OREOCEREUS CELSIANUS
(Mountain cactus)

THE GENUS OREOCEREUS (Mountain cactus) consists of five well defined species, all native to the Andes in Peru, Bolivia and Chile.

They are plants of small to medium height, branching from the base often forming large clumps. Flowers are red or dark red, diurnal, with a cylindrical tube.

They enjoy full sun in a rich sandy soil. All species are interesting and well worth growing.

O. celsianus is a lovely species of easy cultivation whether grown on its own roots or grafted. It will withstand temperatures down to 25° without damage.

It is native to the eastern slopes of the Andes in Peru, Bolivia and northern Chile. It grows erect to four feet and branches from the base or a little above ground level. Stems are dark green, about four inches or more in diameter with large and whitish, wooly areoles about one inch apart.

Originating at the areoles at the top and some distance down the stem are long silky white hairs which hide the clusters of radiating yellow spines which are up to two inches long.

Flowers are borne near the top and are up to three and a half inches long, brownish red on the outside, paler inside. The plant prefers a sandy and stony soil rich in humus. There are two other varieties of O. celsianus:

O. celsianus var. Bruennowii which has more slender stems with matted brownish white wooly hair.
O. celsianus var. Williamsii the stems of which are densely wooly with long white hairs and shorter wool, more or less matted.

Other interesting species are:

O. fossulatus which has five varieties.
O. trollii
O. Henricksenianus which differs from O. trollii in its long, golden-yellow silky and glossy hairs and its larger size.
O. doelzianus was removed from the Oreocereus genus by Curt Backeberg and placed in a new genus and given the name Morawetzia doelziana.

REF: BORG, "Cacti"; HAAGE, "Cacti & Succulents", Britton & Rose, "The Cactaceae".

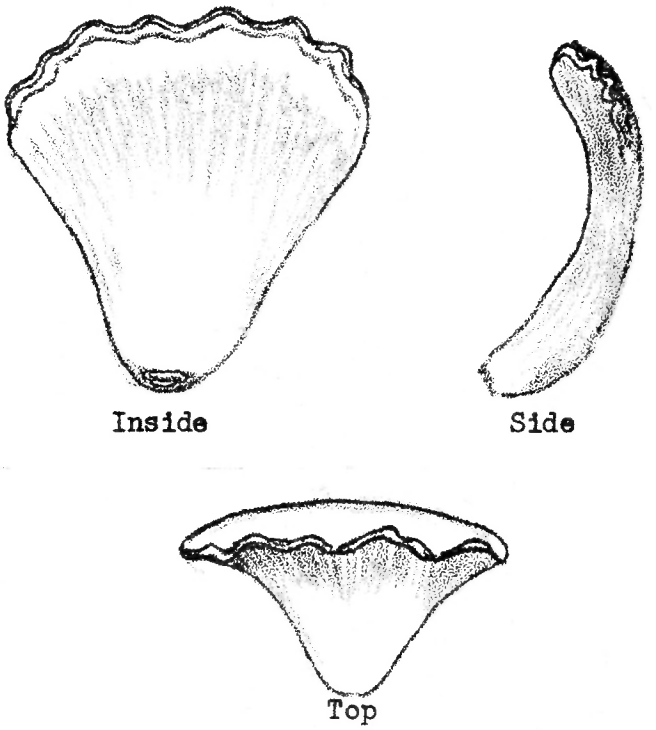
- -

JULY--Cactus: ESPOSTOA LANATA, Succulent: ECHEVERIA CRENULATA

AUGUST--Cactus: ARIOCARPUS FISSURATUS, Succulent: CRASSULA (ROCHEA) FALCATA

COTYLEDON UNDULATA

Succulent-of-the-month
By--Floyd L. Gable



COTYLEDON UNDULATA LEAF STRUCTURE

COTYLEDONS belong to the Crassulaceae family. They are native to South Africa, Southwest Africa, Abyssinia and the Mediterranean area.

They are succulent shrubs often growing compactly and forming clumps. Many have beautiful leaves and others have very peculiar stems such as C. wallichii, C. cacaloides, C. reticulata and C. dinteri. The last named species go completely dormant in summer and lose all their leaves. They are characterized by thick, knobby stems caused by heavy leaf bases which remain permanently on the plant.

With the exception of the above four species, most will propagata easily from cuttings. These four grow easily from seed.

Some species with beautiful leaf structures and coloring are:

C. orbiculata (plant-of-the-month) see figures above, has fleshy leaves two to three inches in length and width and it is edged in red. There are four distinct varieties of C. orbiculata.

C. radicans (rooting from the stem) is low growing with sharp pointed fleshy leaves of yellow that turn bright red in cold weather. It blooms in May.

C. teretifolia (having terete or cylindrical leaves) is very distinctive with clusters of erect dark green hairy cylindrical leaves.

Other interesting species are C. Barbeyi, C. ladismithiensis, C. macrantha, C. grandiflora and C. gracilis.

Succulent-of-the-month C. undulata is undoubtedly the choice of about thirty known species in the genus. It is widely distributed and cultivated. It is glabrous (smooth; devoid of hairs or pubescence) shrubby, erect, up to three feet in height. It has large beautifully undulating leaves.

The bell shaped five-petaled flowers are pendant in clusters on a stalk which arises from the center of the plant. They are bright yellow and tinged with red.

To maintain the whitish bloom on the leaves, the plant should be watered at ground level, not sprayed from above. Correct watering is well worth the effort to have a flawless specimen.

Ordinary soil mixtures suit this plant. It is not overly sensitive to excess moisture or other varying soil conditions. It is native to Cape Providence, South Africa, its exact habitat not being known.

(A good reference is "Succulents for the Amateur" by Brown, White, Sloane and Reynolds)

YEAR OF THE WOOD

June '71

Wilson Wells reports

The combined committee wishes to thank the whole membership for the wonderful showing of plants for the May 1st contest and the Open House on May 2nd.

Robert Fletcher with Pat & Martin Mooney checked in all of the exhibits which totaled over 250. Every plant checked out on Sunday to its rightful owner. This was a great accomplishment due to the strict watch of Olivia Fletcher.

When you want something that no one else has -- call on Lauron Lovelace. Who would have yards and yards of blue cloth to cover the tables? Who would have many empty one-gallon paint cans -- who would have stacks of three and four foot long boards? All just what was needed for our display? Staging ChairMan Lauron Lovelace was the Man-of-the-Hour! Ricky Latimer and Bob Meyers served on his committee and saw that all plants were properly arranged. Jack Schlotte handled the ribbons for the awards. These three committees, plus Walter Scott who handled the securing of our judges, constituted the whole setup.

The clean-up group who stayed after the show did a wonderful job of getting the building in proper order again. Sweeping, setting up chairs, taking down tables were just a small part of their labors. I'll not name them and will let them go as "unsung heroes". Each one knows personally who she and he is, so again I say "thank you".

The judges -- Warren Buckner and Anthony D'Attilio -- did an outstanding job in going over all of the exhibits. In watching these two work as a coordinated team, you could see that they evaluated every phase of the plant under observation. This was hard work. They did a good job and deserve all the praise they will receive for a long time.

While the majority of visitors at our Open House were from San Diego and nearby satellites, they also came from Los Angeles, Van Nuys, Hollywood, Fullerton and Pasadena. Out of state cactophiles were from Commach Long Island, NY - Chicago -Bryn Mar, Pennsylvania, - Myrtle Creek, Oregon - Cromwell, Connecticut - Lakeland, Florida - Silver Plume, Colorado - Tulsa, Oklahoma - Seattle - Corpus Christi, Minneapolis - Salt Lake City among others. We were also very pleased to have present visitors from Santiago, Chile - Germany - and Italy.

NOW we go to THE FAIR!

W*I*N*N*E*R*S

Class I (Single cactus)
First - Frances Richardson
2nd --- Phil Corliss
3rd --- Ruth Nelson
HM ---- Alice Wells

Class II (single succulent)
First - Oliver Loyland
2nd - Perlso Lewis
3rd - Alice Wells
HM -- Alice Wells
HM -- Ruth Nelson

Class III (3 cactus or more)
First - Perlso Lewis
Julie Rice - 2nd
3rd --- Nellie Kennett

Class IV (3 succulents/more)
First - Ricky Latimer
2nd --- Perlso Lewis
3rd --- Ruth Richardson
HM ---- H. W. Harrison

Class V (Combination C&S)
First - Doc Vaughan
2nd --- Walter Scott
3rd --- N. P. Steveson

Class VI (Bonsai style)
Nibby Klinefelter - First
2nd --- Walter Scott
3rd --- Ruth Richardson
4th --- Nellie Kennett

(YEAR-of-tHE-WOOD WINNERS continued) (HM = Honorable Mention)

Class VII (Miniatures)
1st ---- Ruth Richardson
2nd ---- Nibby Klinefelter
3rd ---- Ed Miller
HM ----- Walter Scott
HM ----- Perlso Lewis

Class VIII (Anything Woody went)
Oliver Loyland ---- First
2nd ---- Walter Scott
3rd ---- Francis Richardson
HM ---- Walter Scott

It was a great show well managed -- we won all the way with Wilson Wells!

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NOW it's On to THE FAIR! We're with YOU, Wilson!

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MYSTERIOUS POET STRIKES AGAIN or is it ANOTHER MYSTERY POET HEARD FROM ???

In ESPINAS y FLORES, I soon knew
The cartoonist, lo, --Kind Sir,-- is you!
All made to order and going great
In bringing your readers up to date
'mid sketches that make one's eyes to dance
With the comical aspect of cactus plants!

I read about the One Celled Berry,
And aeroles, so "squelchless" -- very!
Revealing, too, the age-old theory
Of humor's link to tragedy --
That spunky trait of "making do"
With desert heat and evening dew,
Where, SOMEHOW, minus makes a plus,
And beauty's shown with little fuss...

How splendid, too, are groups like yours,
Where glamorized with fun are chores,
How else, when folks are gay and kind?
(Knock, and be welcomed; seek and find.)

"Congratulations!"
from a passer-by

(Editor's note: The above verse was received by Scotty, of course, mailed with the January (unaddressed) issue of EyF. Dear Passer By -- How kind of your to share your appreciation with us. ThanX.)

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Do you throw away old copies of EyF? WELL! However, when you decide they're crowding you please pass them on to the Libarian or the Editor to fill requests for previous issues. Every issue is a treasure!

NEW COMMANDMENTS
of the NEW EARTH

You shall live in harmony with all the earth and with every living thing.

You shall return to the earth all the organic treasures she freely gives.

Do not put greed above duty, nor wealth above wonder.

Do not demand useless things or trade for unnecessary things.

Every man shall have his fair share of the earth and no more.

You shall fight to protect the earth; it is your home.

Be masters of technology and not its slaves.

You shall make beautiful and enduring whatever is to be made.

You shall keep faith with future generations and be wise guardians of their inheritance.

When all this is done, come together with all your brothers and sing the joy of the earth.

(These are the commandments of the New Earth. Composed by Environmental Teach-In Committee of Milwaukee, Wisconsin.)

AS IT WAS WRITTEN

by Dr. R. Vaughan

The more that we give thought to the LAW that governs our planet and our life, we are impressed by the fact that there is no room for anything to "just happen". For every action there was a predetermined reaction, affecting all creation for all time to come.

Before LIFE could appear there had to be DEATH. The ancients wisely wrote: "Om Mani Padme Hum" -- The pearl is in the lotus. You may have seen a lotus in the dawning of a day when the rays of sun are mirrored back from the drop of dew that clustered in the center of the thousand petals of the lovely lotus. A rainbow of colors like a great jewel resolves the light into the colors. The mirror of a placid pool reflects the heavens above so that the earth and the morning stars are one and the same.

Upon reflection we look into the depth of the pool and see that the long tendril of the lotus sinks into darkness, slime, filth, decay and death of other forms of life. So from the roots that are anchored in the darkness of death we behold the beauty of life. This beauty is ephemeral and in turn must pass, for the LAW has so ordained.

I have written of the birth of the land masses and the work of the acids leaching the rocks as hydrogen and sulphur combined with the carbonates and formed salts much as we have today. But Nature needed soil, and so we have the coming of the great Ice Ages. Mother Earth had convulsions and the North Pole departed from Indai to settle in Boothnia Land in what we call Arctic and Antarctic regions. Ice formed in the Arctic and Antarctic miles thick on the crustal earth. The earth sank. Seas rose and flooded what we call the Missouri-Mississippi regions. The glacial sheet was gravity moved to shove and cut its way southward across the Cambrian Shield down into Montana, Michigan and the Lauretian Basin. This grinding and chiseling of rock-against-rock formed a fine sandy soil that was carried down into the valleys by the rivers that flowed from the glaciers' terminations.

Deltas rose from the sea. Calcium and iron cemented the soil that was born new into solid land. Rivers cut channels. Along their banks came herbage, trees, flowers -- all formed of carbon. For no life can exist without carbon. All that we eat is carbon in some form -- be it roast or fruit, sugar or garden truck.

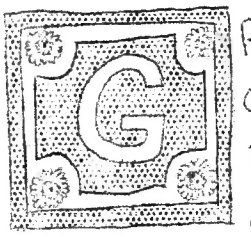
Vegetation had to have carbon just as our bones have to have calcium. In interstellar space there is more carbon than any other material. In the cluster of ANDROMEDA is the "Coal-sack" which is composed of carbon and extends millions of light years into deeper space. It is often called "The Horsehead". It hides the great stars and their satellites that are hidden behind.

Then remember that there are carbon atoms in space around our earth in a ratio of about one to a cubic mile. These atoms float along until a photon of sunlight impinges upon it and then it is driven at the speed of light through space. On its way it meets other atoms, and when two atoms or more meet, they form a MASS and exert a gravational pull that attracts other atoms. Carbon is black so that photons of light repel it. The LAW was written this to be so.

When Primordialooze felt the stirring of life, it felt for carbon and the light photons delivered unto them the carbon, so that they could form and build and change into other than slimy scum in pools where sea and land fought a never-ending battle. The earth and its rivers built, the sea and the winds destroyed. At last vast savannahs were born. Food would be ready for the life that was ordained. It was WRITTEN by the LAW.

GROWING GYMNOS FROM SEED is a most rewarding experience.

PART II



GROWING GYMNOS FROM SEED

by Billie Lucas

I sow seed in 6-inch lay pots filled with normal cactus compost which has been sterilized. The pots are wrapped in foil and Saran Wrap is stretched over the top. The pots are placed in my seed window covered with red cellophane. After several months the Saran Wrap is removed, but the soil is still wet from the first watering. The soil on top is then allowed to dry out between waterings, and after another month the foil is removed.

Even then I sometimes put the pots in large baggies for awhile to keep the moisture. When the seedlings are large enough, they graduate to my living room window and then to the cactus shelters outside. Since seed is sown indorrs, I can make up seed pots any time of the year. Temperature inside is kept at 75-80°F during the day and 60°F at night. Most people keep their house temperatures lower than this, but I am always cold.

Young Gymno seedlings are usually rather nondescript green globes with white bristles -- not particularly attractive. They can't compete with the young beautifully spined Mammillaria seedlings. But seedlings can change rapidly, and after about six months spination becomes much more interesting on the Gymnos. Rate of growth varies tremendously. The large Macrosemineae seeds sprout rapidly into big green globes that grow very fast. Ovatisemineae seedlings grow relatively fast, also. The germination rate for Muscosemineae seed must be almost 100% for fresh seed, but the seedlings are small and grow slowly at first, although growth rate accelerates considerably after six months.

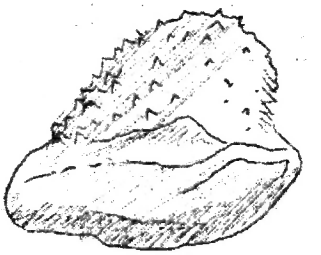
Trichomosemineae seeds are extremely fragile and should always be inspected with a magnifying glass before planting. A commercial packet of Trichomosemineae seed will often contain only bits and pieces of seeds, but no whole seeds. Planting these bits and places is, of course, hopeless. Trichomosemineae seedlings are usually rather slow growing, but well worth the extra care, as this group contains many of the most desirable small Gymnos.

Microsemineae seedlings are tiny and often very slow growing. Nevertheless, many of them eventually grow into quite large plants.

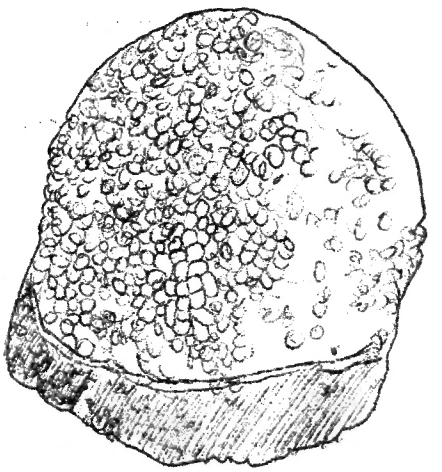
I have observed only two cases of dichotomous branching among my Gymno seedlings. As tiny plants, both baldianum and spegazzinii v. major appeared to be cresting but eventually split dichotomously into double-headed plants. Each head on baldianum is now (on March 16th, 1971) one and one-half inches in diameter, while each head on spegazzinii v. major is only three-eighths of an inch in diameter. Neither plant has shown further signs of dichotomous branching. The baldianum and spegazzinii seeds were planted at the same time. Thus it may be seen how much faster the Ovatisemineae baldianum grew than the Microsemineae spegazzinii v. major. The largest single-headed baldianum is now 2-3/4" while the largest single-headed spegazzinii v. major is only 3/4" in diameter.

The smallest seedling of spegazzinii v. major was grafted onto an Echinopsis last summer and is now 1-3/4" in diameter. All of this seed was planted in September of 1968. The largest baldianum first bloomed in May, 1970, and was followed by the other baldianum seedlings during the summer of 1970. The grafted spegazzinii v.

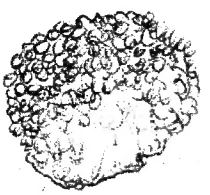
MICROSEMINEAE



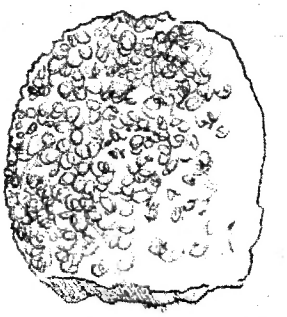
TRICHOMOSEMINEAE



MACROSEMINEAE



MUSCOSEMINEAE



OVATISEMINEAE

0 1 2 mm

(GROWING GYMNOS FROM SEED continued) variety major may bloom this summer.

Several years ago I purchased from Sears in San Francisco a 6" plant of Gymno saglione in a plastic pot for $1.65. Quite a bargain I thought, but the plastic pot was too dangerous. My "bargain" proved to be a disaster, for the plant was full of rot. I cut and cut and continued to cut until I was within one-quarter inch of the apex. Disgusted with my hollow shell, but not willing to toss it in the trash can, I left it on the potting table to be thrown away another day. The plant was forgotten for two months. Finally, when I was cleaning the potting table, I decided that the plant should be thrown away. Much to my surprise, the hollow shell had put out three tiny roots just one-quarter inch from its apex! So I filled the cavity with a mixture of coarse sand and perlite and plopped it onto a 6" clay seed pot filled with compost. When the saglione was repotted last summer, I discovered that the hollow was completely filled and a nice root ball had formed.

My first Gymno cardenasianum was another problem. I had wanted this plant for a long time, but it seemed to be unavailable. Anya Parsons, a cactus friend, gave me a 3" habitat-collected plant for Christmas in December, 1968. It had been planted in a plastic pot by Anya, and I watered it very carefully inside. After aigns of new growth it was put outside in June, 1969. I became suspicious, however, when new growth began to look dull. When removed from the pot, the plant exhibited dark rot which extended into the taproot. After extensive surgery was performed, the plant was allowed to callus over before repotting into a 4-inch clay pot. It had just begun to form new roots when it was accidentally knocked out of its pot.

Apparently damaged, the roots again rotted and were again cut off and the plant left to callus before being repotted. Finally, by November of 1969, cardenasianum was firm in its pot, although very much dehydrated. However, by March 16th, 1970, it was plump, healthy, and showing new growth. It was put outside and has given me no more trouble. I am hoping for blooms this summer. A grafted seedling cardenasianum showed new roots only three weeks after being cut from the stock.

When you decide to buy new plants, consider the genus Gymnocalycium. A good selection for a mixed cactus collection should include the following Gymnos: baldianum -- denudatum -- andreae -- multiflorum -- oenanthemum -- leeanum -- bodenbenderianum -- leptanthum -- cardenasianum -- spegazzinii. These plants will reward you with good clean growth and an abundance of beautiful flowers.

* * *

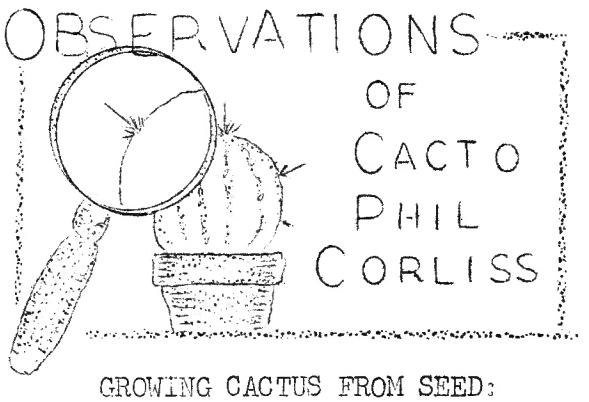
Thank you, Billie Lucas -- the "real you" came forth beautifully -- we have had many compliments on your articles, including "MOST informative," from Cactophil Corliss, and "The best information on Gymno's I've seen," from Plant-of-the-Month Floyd Gable. We are looking forward to --quoting from your letter-- "a more interesting article after I have seen the blooms as my own hybrids are still inthe seedling stage and will not bloom for a year or two."

Dated March 29th: "It's so nice to belong somewhere, as I am quite isolated from other cactophiles. I can vicariously enjoy all of the activities of the San Diego C&S Society. Buena Suerte. " signed Billie Lucas. Believe us, it is our pleasure.

* * * * * * * * * * * *

CORRECTION requested: (Dated May 19th) "On page 5, paragraph 3, please change to read: 'A plant received as Gymnocalycium mostii is in the Macrosemineae seed group instead of the correct microsemineae seed group. It appears to be intermediate between denudatum and heuschkelianum."'

(Reference for seed groups and relative size from "THE CHILEANS" - Organizer H. Middleditch, 5 Lyons Ave, Helton le Hole, Durham, England; Editor A. J. S. McMillan, Bristol.)



PLANT SOURCES--Continued from May '71 issue:

When you order plants, be sure to state that you are a member of the San Diego Cactus and Succulent Society. If you do not receive prompt and satisfactory service, we will certainly not continue this free advertising.

GROWING CACTUS FROM SEED:

Once again, I urgently refer you to my column in the June, 1970 issue of Espinas y Flores. Raising seedlings is not only a way of increasing your collection, especially with varieties of which plants are expensive or hard to find, but it is a most rewarding experience for the true cactus lover.

Besides my suggestions of last year, and suggesting that you read chapters on seed raising in cactus books, I would like to add the following: There are two good reasons for using separate containers for each variety:

1) Fresh seed of many genera germinates promptly; old seed and certain genera require much longer periods, up to a year in some cases.
2) Some species grow much more rapidly than others, even in the same genus. If slow and fast growers are in the same pan, it may become necessary to transplant the vigorous varieties long before the others should be disturbed.

Be warned that cactus seedlings will not stand the neglect that mature plants will tolerate. For beginners, I suggest that the easiest genera to raise from seed include the mammillarias and the echinopsis and neoporteria groups. Among the most difficult are the parodias, yet oddly, the closely related notocactus are usually easy, perhaps because their larger seeds contain material that will sustain them for a better start in life. If you do not wish to venture the expense of buying seed until you have mastered the ability to grow them, try your hand at raising seed from your own plants first.

COMMERCIAL SOURCES OF CACTUS SEEDS: (No changes from last year)

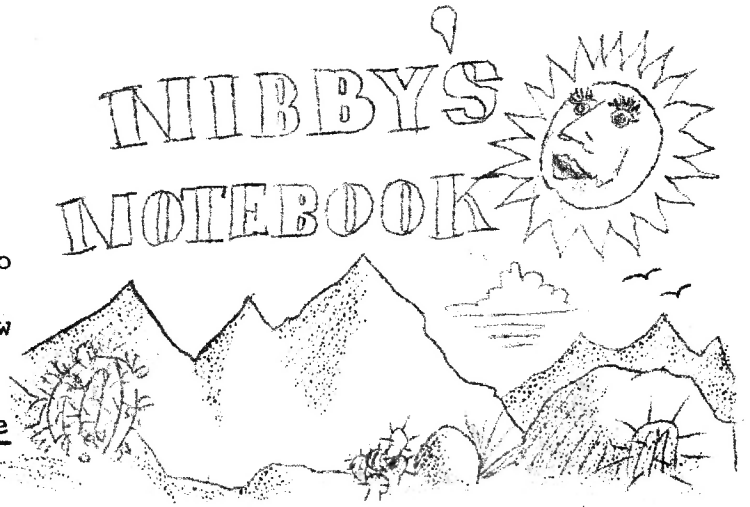
DOMESTIC: By far the best source is NEW MEXICO CACTUS RESEARCH (P. O. Box 787, Belen, New Mexico, 97002) Send 50¢ for their catalog (free to regular customers) listing more than 2,000 varieties of cactus and 500 other succulents starting at 25¢ a packet, with discounts on large orders.

OVERSEAS: THE EXOTIC COLLECTION (See above) distributes free seed packets each year to members and offers additional packets at small charge.

H. E. BORN (See above) lists about 1,000 varieties of cactus and 500 other succulents in their free catalog.

KARLHEINZ UHLIG, 7054 Rommelshausen, Kreis Waiblingen, Lilienstrasse 5, West Germany, lists over 1,000 varieties starting at 10¢ a packet in their free catalog.

NOTE: A 6-page listing of cactus and succulent nurseries was made available at the El Paso CSSA Convention in May 1971 for 50¢ per copy. It includes 1) California nurseries, 2) U. S. nurseries outside California, 3) Foreign nurseries in England, 4) European nurseries other than England, and 5) Miscellaneous. Address: Mary Bleck, 3394½ Centinela, Los Angeles, Ca. 90066.



In Old Town the severely-pruned lantana has recovered and is flowering its Persian-print best, combined with the yellow and orange calendulas, to bring an early summer into focus. Summer brings THE FAIR... Wilson says that he is going to need all the help he can get, and will announce WHEN will be the best time to show up in Del Mar to make an instant Dreamland come to Life... More about that at the meeting on Saturday, June 5th -- WOW -- the Fair opens June 24th!!!

"PRESERVATION of the ENVIRONMENT and the BEAUTY of the AMERICAN LANDSCAPE" will be the theme of the annual Flower Show June 24th through July 5th at the Southern California Exposition, announced Bob Lamp, who has kept things glowing in Del Mar for some years as Superintendent of the Flower Show. Waterfalls & fountains will be a dominant feature -- there will be 75 featured landscaped gardens -- more than 9,000 entries are expected. "We try to create a festive background including a little fantasy to stir the imaginations of old and young," Bob remarked candidly.

So, we'll see you AT THE FAIR -- the place to be is THERE!

Really, isn't that why you belong to our C&S Society? Because we do such suctaculent things together? Wilson Wells is our able chairman this year. He would like to have more people participate with more plants than ever before. If you want to help haul plants to Del Marr, call the Nelsons who are in charge of Succulents. Contact Floyd and Wilbur even sooner because they're really READY to G*O with background contouring and flagstone in place. Hazel & Scotty have things pretty well in hand with grafts but you might check if you have a treasure you feel they can use. (Telephone numbers on the back page.)

One of the big problems in getting in touch with people who have signed up to help and who want to help is a simple matter of finding them at home, sometimes -- please don't feel neglected -- but please do share the work. And the FUN! See what goes on behind the scenes... You'd never believe! Why, last year Nellie Kennett shimmied up a flagpole after climbing on Bill Nelson's shoulders to reach it,....all for electricity for plugging in the coffee. And the President threw a huge pot of gasteria maculata at the Secretary ... Jack Ramay mixed goodies for Elaine Niehaus ... Eve Warn, Julianne Rice and Sophie, as well as Nellie and Hazel and Evelyn Chatham brought great hearty food for those who were throwing the plants around and into displays ... and who brought the fabulous roasted turkey?

Shall we do it again? It was a spontaneous potluck (or so it seemed) that happened when we went out to work. What about big days on the 13th, Sunday and the following last weekend, particularly Sunday? Big days for workers and potluckers, that is? Let's MAKE IT HAPPEN!

TRANSPORTATION NEEDED. If you have a truck or a van, pickup or station wagon let the chairmen know. Not only to take plants TO but there's FRO as well. Plants are brought home, usually, the days following the Fair.

****

What will be our memories when it's Fair time next year...?

For all those nice things all you nice people have said about our great little paper, we all thank you. Especially that TREMENDOUS TRIO -- the Scotts, Nelsons & Loylands. Scotty alone did enough for an issue -- we saved the best for last and herewith on the turn of this page present the SCOTT CSSA SUPPLEMENT! It was a great convention and you can read all about it! The Nelsons were at the Convention and contributed their article as well as helping put the paper "to bed" -- they, along with Elaine Niehaus and Ione Hubner and Sophie & Oliver are stamping, labelling (thanks again, Warren) and actually running page 2 (this page 13 is the last to be typed to the tune of the-rex-rotary-is-running!!)

Next month (while there is still room to say it) there will be articles by Joan Fleer (which arrived in today's mail) and Larry Mitich (of Fargo, N Dakota, who belongs to everything with spines from here to Florida) whose copy arrived in yesterday's mail, as well as Mitchell Beauchamp --President of Palomar C&S and Dudleya expert who took a trip on a boat to Baja -- article came the day before... We are also looking ahead to the latest on Plants & ESP by the versatile young Doctor Bill Joy, another member-by-mail, of Los Angeles. Scotty is still expecting copy from CSSA conventioneers.

James Whitehead, Saturday's speaker, is Superintendent of District 6 of California Department of Parks & Recreation. He'll touch on the noteworthy "inholdings" of the Anza-Boreggo Desert for which our society collected money and there are a number of members who want to contribute, as well. At $55 per, who else will have an acre? Both Julianne and Hazel are ready to forge ahead on this one.

We had so many new members that I ran out of space for the PRESIDENT's MESSAGE on the back information sheet. but Ione had said: "Under the dynamic direction of Wilson Wells our Year-of-the-Wood competition and the Open House following on May 2nd established what a wonderful show our members can whip together when they really become involved! We truly appreciate the number of people who brought plants, and I am sure that one and all join me in thanking Wilson." Our gratitude, too, to Bob & Suzanne Taylor for contributing their time and professional know-how with the Melocactus grafts."

How great it is to have a Secretary like Harriet Sopp who signs her Minutes "Happily yours". Bless you, m'dear.

The Photographic Society of America's GOLD MEDAL was recently presented to our own Alice Dombey Taylor for her photo of two chimpanzees at the SD Zoo entitled "O Love". It appeared in the Rochester Internat'l Salon magazine--we'd love to see a copy.

The slender, reserved, young man who helped at the May compeition was Jack Schlotte, no stranger to Flower Shows. Out of the 30 classes in the recent Coronado Flower Show, he entered 20 and went home with 5 blues, 6 2ndds, 5 thirds and 3 HM's in the Cactus Division and dish gardens. Having entered once before with a single entry-- a winner --there has been no stopping him, and he has really picked up momentum!

Non the San Diego C&S Society --before the year is half over we have picked up our 200th member -- CEIL FULLER -- of Pacific Beach. Ceil has recently retired from MCRD Post Exchange. She is a friend of the Taylors, and when she saw a notice in the Sentinel and remembered all the nice things Bob & Suzanne said, she came and saw and joined! Welcome. (Out of space AGAIN!)

CACTUS AND SUCCULENT SOCIETY OF AMERICA, INC.

1971 Convention in retrospect.

The Fourteenth Bi-ennial Convention has ended. Our very sincere appreciation and heartfelt thanks go to all the dedicated people whose work before, during and after the convention made it a total success and every event and occasion one which will be pleasantly remembered. The CSSA and six Clubs. El Paso, Houston, New Mexico, Tucson, Rio Grande and New York deserve special commendation for their efforts. To each and all THANK YOU !

Activities were thoughtfully diversified, organized and planned. They represented the efforts of many individuals. It was obvious that everyone attending was very pleased with total results. It was a very, very busy week. Activities began early in the morning and continued through the late night hours. Included were garden tours, sight seeing, exhibits, banquets, seminars, plant and book procurement tables, plant drawings, collecting trips, entertainment and slide shows during evening hours. In spite of intense activity, all of us found time to greet old friends and make new ones. Some familiar faces were missing, Editor Charles Glass and Assistant Editor Robert Foster of the "Journal" were on a European lecture tour. Their reports upon their return will supplement convention activities. Don and Murray Skinner, King and Queen '69-71 were unable to attend.

The comments, observations and illustrations in the pages immediately following may serve to recall and revive happy and wonderful experiences. Contributions are frank and unedited, they express the feelings and thoughts of individuals and they represent a cross section of CSSA membership across the land.

Contributions are not presented in the sequence of the official program, but rather in the order of their receipt to meet publication deadline for the June issue of "Espinas y Flores". Neither are they a complete and full review of all convention activities. It is possible some reports may be post-deadline, and if so they will appear in future issues of "Espinas y Flores", as will some contributions not necessarily associated with the convention.

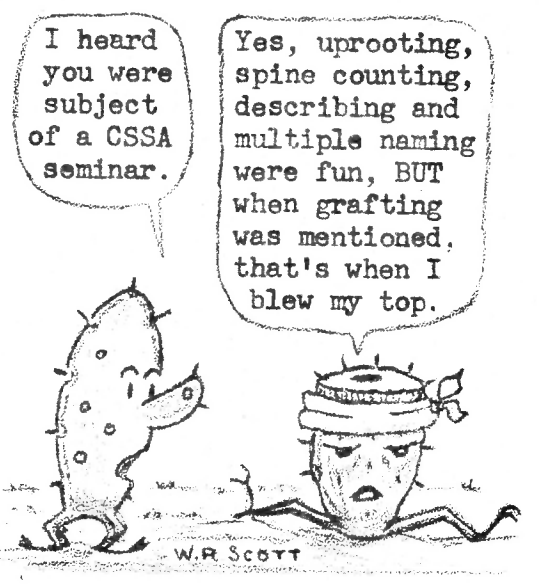
We salute the newly elected King, Ted Taylor, and Queen, Virginia Martin. Knowing these two capable, enthusiastic and vivacious persons, we predict their upcoming reign will be attuned to achievement and progress.

Las Vegas was second in the '69 balloting for a Convention site. They were top this year. San Diego, California's First City was second. In the event the tides of mens fortunes change in the forthcoming year. the latchstring will be out.

And looking to the future--LAS VEGAS 1973--a resounding "SALUDOS". We are for you, with you and back of you all the way, Las Vegas. We are looking to 1973 with keen anticipation.

Lest you slip into past reading habits you are cautioned, this "CSSA SECTION" has special page numbers and it is printed on both sides of the sheets. Too, here and now. I wish to say "Tahnk you, THANK YOU" to my "staff". Your efforts are resplendent. Proceed, with caution....you may be "on camera".

---Walter R. Scott, San Diego



TRIP TO SIERRA BLANCA--COLLECTING

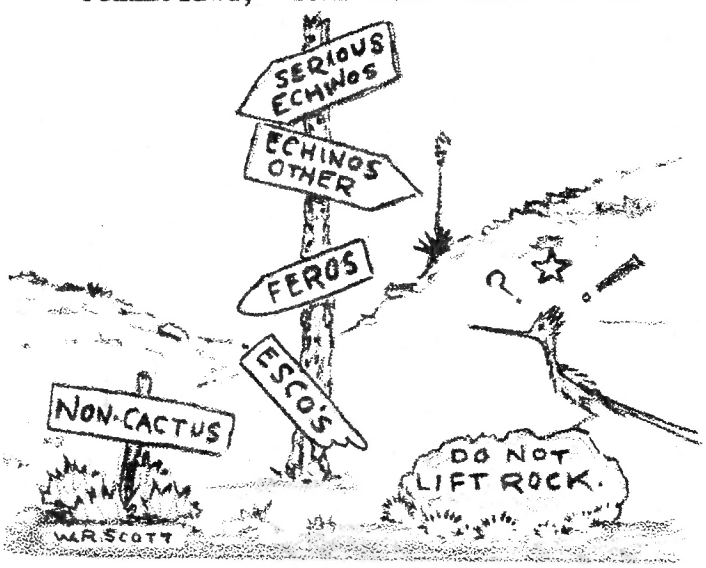
By Cecelia Pelicon, San Francisco

ATTENDING MY FIRST CACTUS AND SUCCULENT CONVENTION at El Paso was a dream to me for so many months that the actual being there, in retrospect, also seems dreamlike. I am a native San Franciscan. My world is fog most of the time. I've never been to the desert. So the trip to the Sierra Blanca area was quite an experience.

Elmer Garess was our driver. Six of us "girls" went in his pickup truck. Four of us sat in the back on luxurious matresses and the other two were up front with Elmer. It's fortunate that none of us were prone to car sickness, because that was a mighty jolting two-hour drive. During the last few miles of the trip huge clouds of dust were the only indications of where the car in front was and also the same for the car in back.

When finally we arrived in the middle of "nowhere", or rather "somewhere" in the middle of a very dry, barren area, we quickly piled out and just as fast piled back in to put on our sweaters. Surprisingly--it was cold! Armed with shovels, picks, trowels and a heavy knife, we were off to collect. Everything was very, very dry. Many dead plants. We collected some Echinocactus horizonthalonius and dug up a few Escobaria tuberculosa--not a very pretty plant. We saw lots of Echinocereus straminius (haystack) nice if you have lots of space, like our own desert. Some collectors found Ferocactus uncinatus hither and yon. We didn't. One lady in our group hit the jackpot. She found a crest of Echinocereus dasyacanthus. We all ran over to the spot to o-oh and ah-h. Elmer said it was the second crest of E. dasyacanthus found in that particular area in ten years.

COLLECTING, 'LONE STAR' TYPE-LOCALITY



The box lunches provided by the hotel were bleah. Stale bread with tough potroast and an apple that had seen better days, a small chicken part, dried by the drought, no doubt. The desert even in its desiccated state had a beauty and majesty which I enjoyed. It is a miracle that life can survive in such austere and dry conditions.

It bothered me that so many people collected so many plants. What in the world will they do with the collected plants? Members of a society like ours should practice conservation more and greed less.

It was a very enjoyable day and trip, even a flat tire we "collected" on our way back was only a small part of an exciting adventure.

* *

ADDENDUM: CONSERVATION AND ECOLOGY (Editor's prerogative)

QUOTE: "The mountains we collected on were rocky, dry and loaded with cacti. It was great! Our first reaction was to dig everything in sight. This was our first collecting trip. As the novelty of seeing cacti in their native habitat wore off, we became selective--looking for single plants rather than clumps; walking by a plant if it was not in good condition; ignoring large old plants which are difficult to reroot; leaving a plant if we thought we had already collected one like it. Although the novelty of hunting plants in habitat wore off, the thrill of finding a plant we hadn't collected never left us."

--Lillian Pickoff (Gates) Riverside, California

PLANT DISEASES AND PESTS

By: Elmer Garess
Plant Quarantine Division
US Dept. of Agriculture

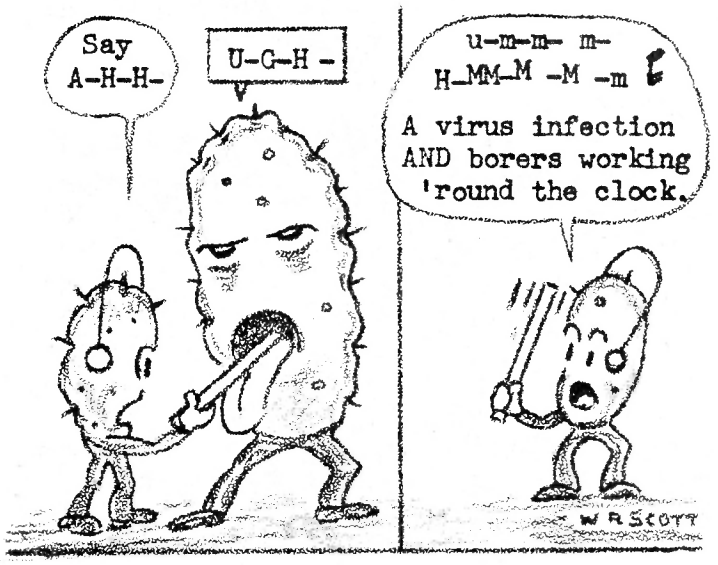
With COMMENTS & ANSWERS by Mr. James A. Baker
Chief Pathologist, Plant Quarantine Division,
El Paso, Texas

Virus and bacteria infections were dismissed rather lightly by Mr. Garess as being not yet amenable to control. Virus infections cause death and weakness of plants and bacterial infections make them unsightly.

Plant pests are divided into external and internal feeders. The external feeders include mealy bug, scale, and spider mites, all of which can be controlled by pesticides. The life cycle of most external feeders is extremely short, often but a few days, and they may rapidly burgeon to great numbers, which means that pesticides must be used at regular and frequent intervals for prevention and control.

Internal feeders (borers, etc) have a much longer life cycle, from two or three months to two or three years! Ten kinds of internal pests were found on one agave! Larvae are usually secondary invaders, following borers, trauma, or other plant damage.

More plants are lost because of fungus (mycelium) infections than all other causes combined. Fungus infections are responsible for two kinds of rot, moist rot and dry rot. The infecting organism is most commonly a fusarium. The fungus begins its attack on the plant surface. The moist rot results in rather rapid collapse of the plant in a soggy mass. With dry rot, the fungus multiplies in the plant tissue and then breaks through the surface in spots of black spores. Some fungus infections will not kill the plant and although it survives in a weakened condition, sections of its body will show widespread yellow-red areas of infected tissue.



Prevention is the best way to prevent loss from fungus. This means good cultural practice such as:

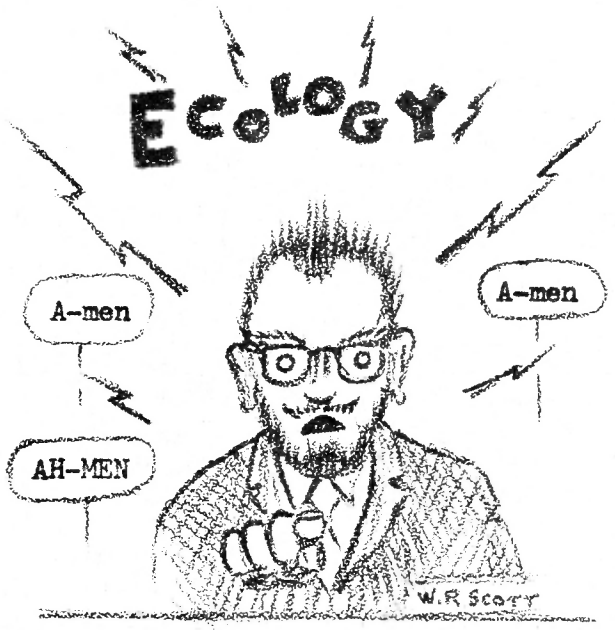
1) Keeping the plants well areated to avoid constant moist surfaces;
2) Avoiding large temperature swings;
3) Using pesticides and fungicides regularly. Fungi may gain entry through damage done by pests.
4) Avoiding excessive saturation of the soil with water.

In discussion of this paper, it was suggested that Consan 20 is a fungicide now available from Grigsby's Cactus Gardens in Vista, California. Benlate was also recommended. I find it is available locally from Anderson's Nursery for $2.98 per ounce, which makes 12½ gallons of spray, for use on ornamentals.

My reactions to this informative paper include the following:

1) I believe that larvae are primary invaders in my collection.
2) I am inclined to use antibiotics for bacterial infections.
3) I am sure that many of my grafting failures are due to fungus infection on the cut surfaces, resulting in wet rot. I will try to avoid grafting in most humid weather and will use fungicide dust (Scott's DAWN) on the cut surfaces after the scion is in place.

Reported by Philip G. Corliss, M.D., San Diego



THOSE ARE OUR THOUGHTS exactly DEL.

CACTI OF THE SOUTHWEST

By DEL WENIGER
Professor of Biology
San Antonio, Texas

PART 1 - CACTI OF THE SOUTHWEST
PART 2 - ECOLOGY

Medium height, slender, sharp featured, longish hair, beard and glasses--this is Del Weniger, Professor of Biology at Lady of the Lake College. San Antonio College, Author of "Cacti of the Southwest".

His favorite cacti are the Opuntias because they are a "challenge".

I was prepared not to like either he or his talk. This Californian could not forgive him for leaving my state out of the SOUTHWEST. As a very amateur cactophile, I was annoyed at name changes he had made in his book. Homalocephala texensis is my favorite monotype and Echinocactus texensis didn't taste good to say.

He explained that to a person from Kansas, California and Arizona are "the" west and Texas and the five adjoining states are the SOUTHWEST. He divides this southwest into seven plant regions: Chihauhuan (Southwest), Coahuilan (South central), Tomaulipasian (South east), Coloradoian (Northwest), Oklahomian (North central) Missourian (Northeast) and Carolinian (East).

The large number of species in Texas (172) is the result of overlap from five neighboring states. The many sub-species are caused by far ranging plants which have adapted to local environment. Where the seven regions meet a special situation is formed. This "edge" area contains more species than other regions. Rare, special plants, i.e. Echinocereus albispinus with limited range is found in this edge. The plants from each of the regions would have similar cultural requirements, i.e. shade, full sun, water, heat tolerance, etc.

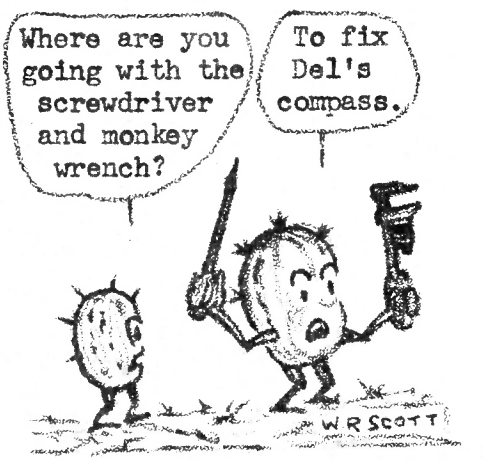
During the latter part of his talk he spoke as an Ecologist, a man who loved these spiny plants. He is worried about their future. He does many plant studies in old graveyards because they are the only places where the flora has remained untouched and undisturbed for from 30 to 50 years. We have all seen mutilated plants and heard of wholesale stripping by dealers in the past.

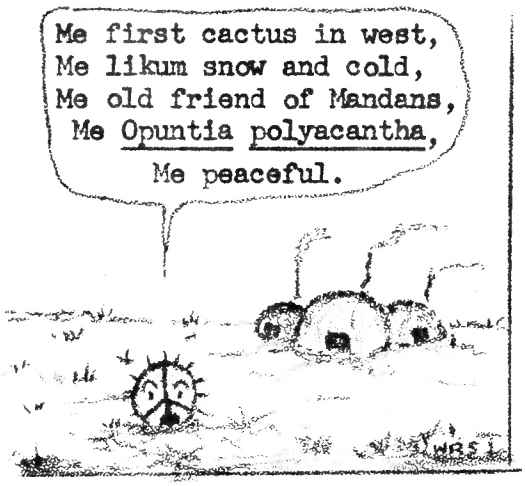
Prof. Weniger spoke of today and tomorrow. Clearing the land for recreation and highways, huge power plants and resultant air pollution, strip mining, changes of humidity caused by large reservoirs, spraying for brush and insect control and an expanding population.

He urges us to fight for our native flora and to try to preserve some of it intact for future cactophiles for study and enjoyment, and he stressed in particular one very fascinating and interesting plant family, cactaceae.

He spoke strongly and with conviction. I agree and support his ideas on preservation of endangered plant species.

--Madelyn Lee





COLD CLIMATE CACTI by Dr. Larry Mitich

— Agronomist and Writer —
North Dakota State University

"North Dakota is famous for COLD and SNOW;
North Dakota is a peaceful state;
North Dakota is home of the International Peace Garden;
Rugby, N. D. is the geographical center of North America;
Cactus raising is a risky business."

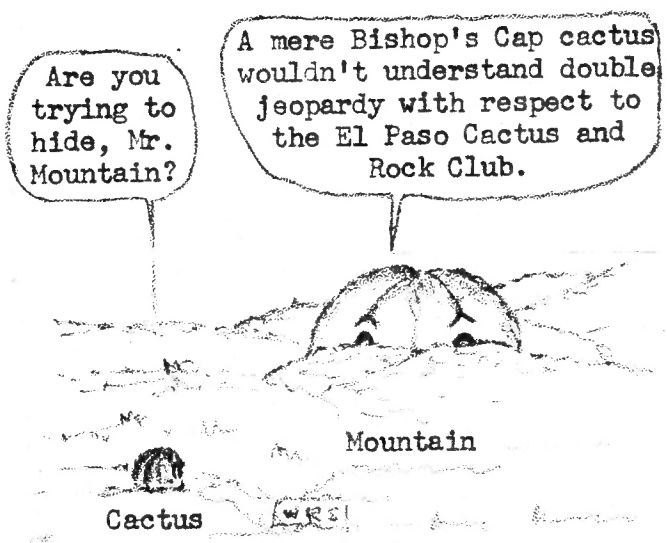
With this factual disclosure, Larry Mitich developed a solid base for information on four species of cacti, one of which, Opuntia polyacantha has the distinction of being the first to be collected and described west of the Mississippi.

The Mandan Indians, an agricultural tribe lived in the area when white men came and Larry says even in those days their women enjoyed "liberation". They built the lodges, did the farming and made pottery. The tribe was noted for beautiful costumes and elaborate ceremonies which were performed to insure crop growth.

In the 1830's artists George Catlin and Carl Bodmer drew and painted many portraits of Mandan Indians and scenes of tribal life--some of the finest pictures of American Indians. In 1811 the eminent naturalist Thomas Nuttall (1786-1859) visited the area and found and collected four cacti species: Opuntia polyacantha, Neobessya Missouriensis, Opuntia fragilis and Coryphantha vivipara.

O. fragilis was called "Missouri pinpillow" by Haworth. Its joints break off easily and become attached to passing animals, thus assuring wide distribution. The species seldom flowers and frequently fails to produce seed. O. polyacantha has a variety of flower colors including pale yellow, golden yellow, yellow with red centers and a very pink in cultivation.

(Larry's presentation showed very careful preparation and it was most informative and interesting.) ---Ruth Nelson, San Diego



PROBLEMS OF BISHOP'S CAPS

OLD MESILLA and LAS CRUCES

Fourteen cars made the New Mexico trip led by Pres. Dale Morrical of El Paso Cactus & Rock Club. We visited the gardens of Terry Corbet, Dale Morrical and Mabel Banegas in Las Cruces. We saw cacti and other succulents in varying environments. Dale's "plastic" glass greenhouse was an "eye popper" with Euphorbias in the "South African section" and succulents in the "climate controlled area", all doing better than in habitat.

The group was slowed a bit in DC's "one-man, one-way" glass house, with a U-turn at the far end. The cactophiles, having only one-way vision were hardest put but the "rock group" having see-thru vision met no obstacles.

On the road again we travelled a twin-rut mountain road with no provisions for passing. Once in the ruts a car stays put. One "caravaner" collected a flat tire, cause unrevealed. Those in back were most helpful, all being in one and the same ruts. What if the collector had been last in line?

By 3 p.m. Arizona was generating a wind which picked up generous portions of New Mexico in passing and transported them to Texas. Big drops of moisture made mud out of dust on the cars, which was the first mud seen in Texas at the visitors' center in eight months.

Everyone seemed very happy with their collected items, plants and ROCKS (and mud) but the question is--did anyone collect a Bishop's Cap, vegetable or stone? ---Ruth Nelson

ORO GRANDE FIELD TRIP--Dale Morrical, leader. --by Hazel Scott

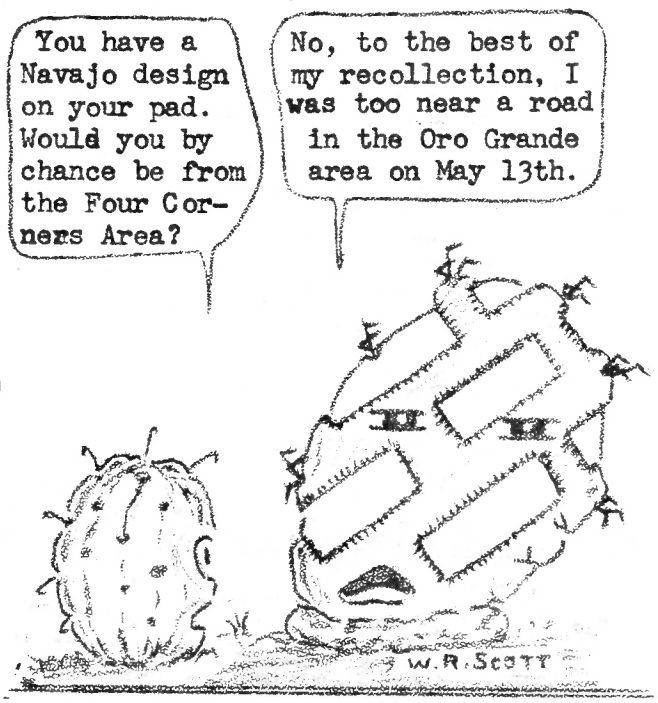
Thursday morning May 13th, an assortment of 30 vehicles departed for Oro Grande, New Mexico, about 60 miles northwest of El Paso. The town surely had seen better days in the golden era from whence its name "Great Gold". Old diggings in the Jarrilla Mountains testify to vigorous searching for nuggets.

We were eager to reach the old mining area. Drivers abandoned vehicles in every accessible spot. Cactophiles swarmed out like bees and made b-lines toward the nearby hills. They disappeared over ridges. It seemed each couple had a mountain to explore. We found an unclaimed one and quickly lost sight of all others. Occasional shouts and whistles told of instant success. We started collecting cacti but soon found very interesting rock formations. Decisions had to be made. My leanings tend toward the stone age. My weighty collection attests to my indulgence. I thought the results of my efforts were "rare". They look even better in our yard.

Scotty concentrated his attention on the flora--spiny variety, of which there was an abundance. He says the roots of some of them were far reaching and in spite of a lack of rain for eight months, roots in the rocky limestone crevaces were in damp soil.

In addition to my heavy burden, we collected Opuntias (3 spp.), Echinocereus (5 spp.) Echinocactus horizonthalonius, Echinomastus intertexus and a couple of cute little "Mams" which answer to the name of "Dasy".

Thanks to perfect cooperation of the weather and temperature and to Dale Morrical's organization, planning and leadership, everyone was generously rewarded and headed back toward El Paso with a feeling of accomplishment.



* * * * * CACTI AND SUCCULENTS INTERNATIONALLY----Dale Morrical * * * * *

"Mr Chairman: I make a motion we have our next convention in Tauranga, New Zealand!

CHAIRMAN: Does someone second Mr. Scott's motion? . . .Mrs. Scott seconds. WHY does the gentleman wish to convene in Tauranga, New Zealand?

SCOTT: There's really no other choice if we wish our Society to keep abreast of develoments on this planet. You just saw Brian Chudleigh's garden, it is out of this world.

CHAIRMAN (Interrupting) Will the gentleman please return to Earth?

SCOTT: Please pardon me, I was carried away momentarily, I was about half way to New Zealand. It will take a moment for my thoughts to return.... ..You know Mr. Chudleigh's cactus garden is second generation. A lot was done with his cacti before he took over. You realize what two New Zealanders can accomplish in tandem? It would be worth the trip, if for no other reason than to see his Arajadoas and his Cochemias. And besides, one could very well pick up a number of pointers on photography. I don't wish to appear rude, but I would make that statement even though Brian Lamb, Clive Innes, Werner Rauh, Bob Foster and Del Weniger were in my audience. Oh-h, pardon me, Del. I hadn't seen you, but you would like to go "southwest" wouldn't you? Of course you would.

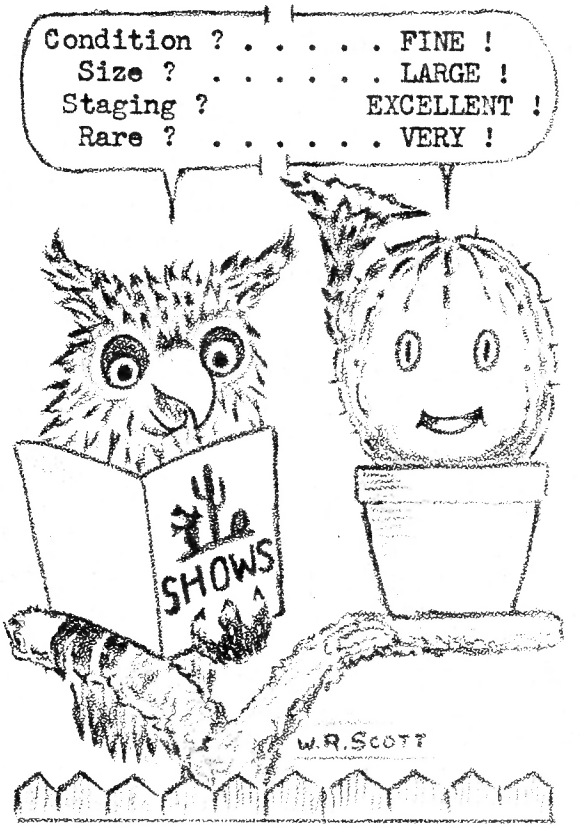
Furthermore the color transparencies you just saw were not done by shutter tricks. It simply is impossible to obtain magnificent transparencies without having real cacti specimens.

May I ask for a vote, Mr. Chairman?

---By an Anonymous Californian
(The writer took ℄ the "Fifth")

CACTUS AND SUCCULENT JUDGING AND SHOW TECHNIQUES

- - John and Mary Bleck - -



The big problem appears when cacti and/or other succulents are entered in general flower shows and judged or misjudged under the same criteria as roses, violets, geraniums, etc. The people who judge these flower shows are well trained and qualified in their fields. As of now our favorite plants have received short shift in this specialized study for judging.

The booklet "Shows" compiled by the Judging Standards Committee and made available (price 50¢) at the El Paso CSSA Convention answers many questions on all phases of succulent shows. This first edition is presented not as a rigid "set of rules", but as suggestions and advice. The information therein is compiled from many sources in areas where difficulties may be anticipated.

"Shows" will be of great assistance to Clubs and individuals. It offers suggestions on grooming and staging; show classes, schedules and rules; duties of show personnel; publicity, as well as judging.

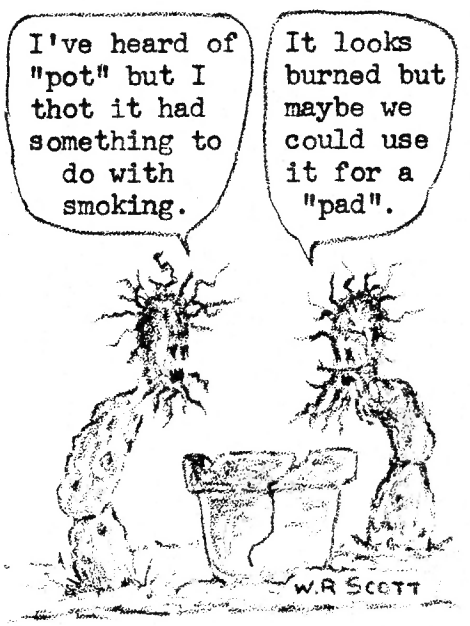
An important section is devoted to listing judges endorsed by the CSSA. Periodically affiliates will be requested to confirm and revise their endorsements.

We all hope "Shows" solves some problems and answers some questions. Thanks to the Committee for the booklet and to the seminar conducted by John and Mary Bleck. We all feel enlightened and a bit less concerned about the welfare of succulents in flower shows.

---Hazel Scott. San Diego

* * * * * * ECOLOGY AND PLANTS OF BIG BEND NATIONAL PARK, by Roland Wauer * * * * * *

Roland Wauer is a man with many interests, he lives each every day. His problem, if any, is to make a decision as to which at the outset of each day. When he sees a bird, he is an Ornithologist; when he stumbles onto a beer can, he's an Ecologist; at work he is a Naturalist; when sitting at a desk he writes.



He told of his many activities and the way of life in the Big Bend...it simply took us away from reality. It gave everyone an urge to see BB and to put it on his "must" list of places to go. He was successful, there were less accommodations in the Park than there were names on the post-convention trip.

No writer could develop the highlights of his talk, each subject WAS a highlight. Without going into detail, I couldn't anyway, which would result in your dropping this paper and becoming BB-bound, I'll mention five items and you can take it from there.

1) Exploration of ancient caves; 2) wilderness areas now and in the future; 3) quicksilver mining in early days; 4) Euphorbia "wax industry"; and 5) plant and bird life. Most happy at this point to leave you out on a limb with the birds.

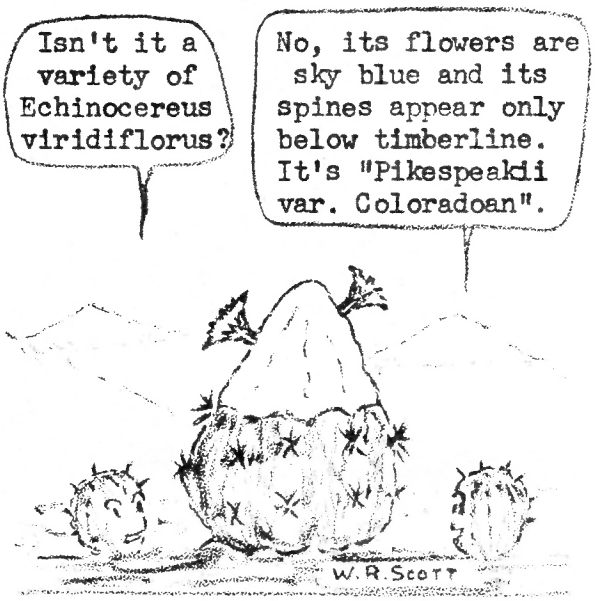
---Walter R. Scott. San Diego

UTILIZATION OF CACTI

By: John Green

John Green is an Agricultural Inspector of the U. S. Department of Agriculture Plant Quarantine Division at El Paso. For ten years he worked as a volunteer with the El Paso Archaeological Society. Studies show that Man's past culture and foodstuffs are revealed by careful search of soil in and around excavation areas. Indications are that Natives of the southwestern area utilized many types of plants including cacti.

Indian tribes in North America held the fruit of Prickly Pear in high esteem. They travelled to find and eat tunas and they would not leave a tuna area for anything in the world. A season lasted from a month and a half to two months. Seeds were saved and ground as a step in the preparation of "atole" (similar to corn meal mush).



Tender young joints were cooked or eaten raw as a vegetable after the spines were removed. The fruit was dried and pressed into cakes for future use. Syrup and beverages were prepared from tuna juice. Dyes were made from red tuna fruits.

Cholla fruits were eaten raw or stewed. Flower buds were eaten after boiling or roasting. Various species of cholla are still utilized by many Indian groups in North America as sources of food. Cholla buds are prepared for storage by pit roasting the greens and spreading to dry. When needed for food they are generally boiled with other foodstuffs.

Most of the Echinocereus fruits are juicy, rich in sugar and may be eaten like strawberries. The Navajo eat the fruits of several species of Echinocereus, however they believe that the fruit of E. coccineus is poisonous. They say it makes one's heart feel as if it were twisted. This species is used medicinally as a heart stimulant.

Fruits of Peniocereus are edible. Flowers are also eaten and the roots may be sliced and fried. The taste is much like that of a turnip but milder. They can also be baked.

Saguaro fruits are eaten and the woody ribs of the stems were used for building purposes. Ferocactus wislizenii fruits are dry but the seeds may have been ground and used for food. Spines possibly were used as fish hooks, hence the name "fishhook cactus". Peyote and Ariocarpus were not used as food because of their alkaloid content, but were used in religious ceremonies because of the effect produced by the alkaloids upon the person.

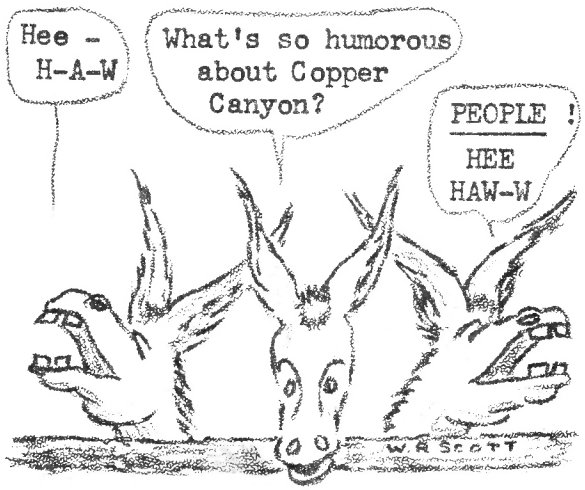
John Green mentioned finding an Opuntia seed imbedded in the tooth of the skeletal remains of an Indian. We can appreciate today's supermarkets and our dentists. John's talk was most interesting and informative and his selection of material and its presentation were superior. His slides told us he had a "talent" for being in the right spot at the right moment, not occasionally, but over a long span of time.

---Mary Ann Heacock, Denver

* * * * * BARRANCA DE COBRE (Copper Ravine) by Myron Kimnach * * * * *

Myron, you should have passed the hat, your audience was on chair edges--wide awake but mesmerized. Had you copper-plated them your statuary collection would have been terrific. Think how much money you saved them overall and the discomforts of those "horrible" roads. There was a hidden hazard--if any of your listeners had been subject to nightmares, his dream THAT night would have been about falling off a cliff into a bottomless canyon, all the while enjoying the scenery during the descent, then to awaken gently on the rug alongside the bed. Those who aren't so afflicted will relive the experiences pleasantly.

And the side excursions. Maybe the future immigranto to Bolivia will be Mexico's loss. What Hoosier ever heard of a "tidy farm"? From a man's viewpoint, what's wrong with unchanging fashions? Wouldn't it be wonderful occasionally to be away from a pushbutton civilization? And the gold miners--were you envious, working one day and resting six? Could you improve on THAT? You didn't mention whether their women folk were "liberated" like Larry Mitich said about the Mandans.



Can you visualize the same trip sometime in the future when there's a gas station at every crossroad, canyons with sanitary fills, dune buggies on every slope and maybe worst of all, no mules with a sense of humor and the Agave wilmorianas extinct?

When the lumber truck bogged down and the crew used your shovel, that's when you should have been sitting on a log in the shade writing a chapter for Mexico Logbook. Maybe yet? "Barranca" was a very interesting, enjoyable and exciting armchair trip. More later?

* * * * * * * * * * * * * * * CACTI OF NEW MEXICO by Prince Pierce * * * * * * * * * * * * * * *

Up in the air you students and collectors--don't imitate a mountain goat--use your heads more and legs less, they wear out first. That's what Prince Pierce is doing and look how youthful and vivacious he stays. At the rate he is succeeding with his aerial techniques, I'll wager he will make one trip and get better results than others on ten trips who use "old" methods, i.e. covering every square yard on foot. Prince Pierce gets photos and topographic maps of the area he is interested in, currently New Mexico, and studies elevations, outcroppings of limestone formations, contours, ingress and egress, etc. then "predicts" where certain species may be found. You got that, he PREDICTS!

Cacti are like people in many respects, they can be very aggravating and disagreeable. They're creatures of habit and victims of environment. Circumstances dictate populations. They become lodged in crevices (ruts to you) and they find it extremely difficult to get out (same as you). They get accustomed to "situ" and become LAZY. (Not YOU)

That may explain where that darling little Mam species got its name "Lazyacantha". Look into that Prince and if necessary, revise the "specific" downward. If you need unbotanical advice, I know a lot of cactophiles, all experts.

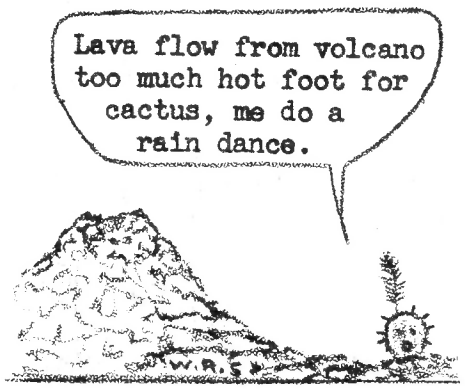
Unprofessionally talking, here's another way to look for cacti--moisten your thumb, hold it up to the wind, note which side dries first, then go that direction. It's an indication of dryness--and that's where you'll find cacti.

Could old timers be envious of you? Success to you and tell us more in your upcoming book.

Walter R. Scott, San Diego

THE CACTI OF DONA ANA COUNTY by Dale Morrical

Range covered is about 150 miles north of Las Cruces, New Mexico, at about 37° North latitude and the average elevation in the flats is about 3900 to 4000 feet. The climate is extremely variable with temperatures as low as 14° below zero and they normally reach 100° in the summer months. The average rainfall for these plants is about six inches a year, with none of this falling in the winter months. The rains don't start until about July, and this should help with greenhouse cultivation of these plants. From October until July is dry, then in the summer months these plants are used to violent thunder storms which come and go rapidly.

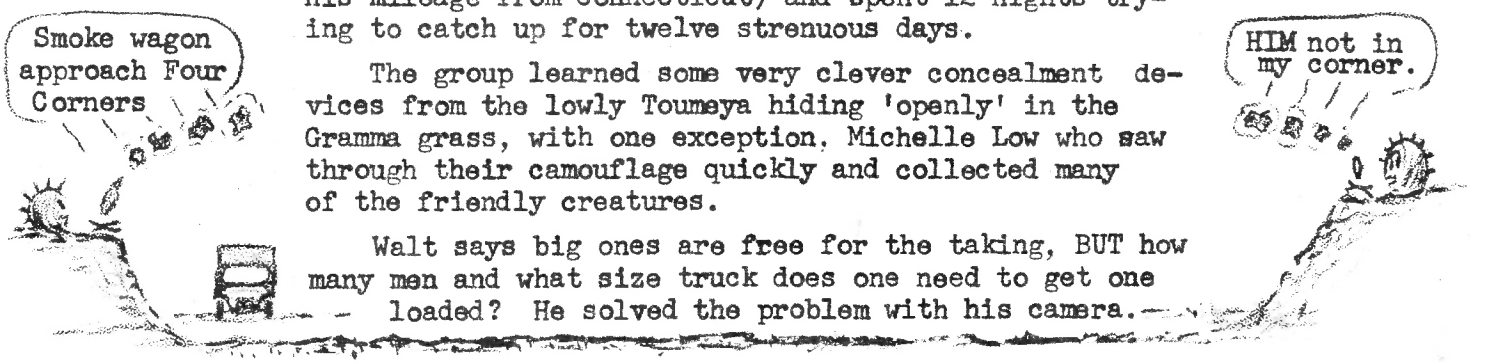


The terrain is extremely varied, from lava flows at the western edge of the county to mountainous terrain to extreme desert. On the east side of the county are the Organ and San Andres Mountains which reach elevations of close to 10,000 feet. However, regardless of the location of the plants found, the growing conditions are approximately the same as regards to water. This information should be of great help to anyone attempting to grow these plants in cultivation.

---Catherine Williams, Houston

* * * * * * * * * * * * * * * * FOUR CORNERS by Walter Beard * * * * * * * * * * * * * * * *

Walter Beard of Connecticut introduced his talk very cleverly with the term UCAN. His color slides showed how they did it in May 1970 and he left an impression on his listeners that UCAN too, IF you have the stamina, plenty of time and a four wheel drive vehicle. UCAN--U for Utah, C for Colorado, A for Arizona and N for New Mexico gives one a comprehensive idea of the scope of their travels. They covered 3,000 miles (not counthis mileage from Connecticut) and spent 12 nights trying to catch up for twelve strenuous days.



The group learned some very clever concealment devices from the lowly Toumeya hiding 'openly' in the Gramma grass, with one exception. Michelle Low who saw through their camouflage quickly and collected many of the friendly creatures.

Walt says big ones are free for the taking, BUT how many men and what size truck does one need to get one loaded? He solved the problem with his camera.

He loaded a toy truck with an "ordinary" specimen and took a picture. Result true to life, a truck loaded with one cactus. When that one grows big, Walt, you will have to resort to your bag of tricks to dispose of it.

One thing Walt didn't have an answer for, and he has lots of company, WHEN DO THE GAYS SLEEP. Yes, when do they?

* *

CONVENTIONS ARE MARVELOUS GROUP ACTIVITIES, they afford a common meeting ground for people and the exchange of ideas. They provide a stimulus for an organization and its membership. They are not ordered like an article of merchandise from a catalog. They represent skilful, tireless and well-directed efforts on the part of key individuals who generate enthusiasm and provide leadership. They require a team effort.

Lead team was Ed and Betty Gay. They had been over the route previously and knew the obstacles and turns. The team with the yoke was the Singers, Manny and Bert. They kept the wagon on course and worked hardest when going was roughest. Standby team was the Lows, Bill and Ellen. They were called upon frequently. In the driver's seat with the reins was our imperturbable driver, President Myron Kimnach. The cargo was delivered and the wagon is ready for reload--destination Las Vegas, 1973. ---W. R. Scott

E S P I N A S y F L O R E S

Mailing address: Editor Nibby Klinefelter, EyF - 2201 Fairfield, San Diego, CA 92110)
Treasurer: Warren Buckner - 1744 Englewood Drive, Lemon Grove, CA 92045 - Dues $3 single $4 family. Membership open to anyone interested in cacti & succulents.

OFFICIAL PUBLICATION of the SAN DIEGO CACTUS & SUCCULENT SOCIETY · Founded 1961
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Affiliate to CALIFORNIA GARDEN) NibbyK

****

Rose D'Atillio reports - The following ladies brought refreshments for the May meeting:

Minnie Mogul
Jean Hopeman
Perlso Lewis
Olivia Fletcher
Alice Bishop
Hazel Scott

For the goodies we all thank you.
(Contact Hazel or Rose - 281-9731 when.)

****

P R O G R A M *

Saturday - June 5th - 1:30 p.m. at Floral Building, Balboa Park

JAMES WHITEHEAD speaking on

"THE ANZA-BOREGGO DESERT"

****

NEW MEMBERS CORNER

Bertha & Manny Singer-6385 Enfield Ave Reseda, CA 91335 (of LosAngeles club)
Elvira Bibbey (Loyal joined in March) 490 Citrus Ave - Imperial Beach 93032
Daisy Dove Dale - 6655 Golfcrest Drive La Mesa, CA 92041
Michael Douglas - 3032 Renault Street San Diego, CA 92112
Doyle & Maria Fisher, Daughter Teresa Kennedy - 1590 Malta Ave; ChulaVista
Ceil Fuller - 926 Hornblend St.SD.92109
Judith Hannula - 4771 Jewel, SD 92109
Mary E. Heacock - 1235 So Patton Court Denver, Colorado 80219
Henrik Kibak - 8341 Paseo del Ocaso La Jolla, CA 92037
Perlso's husband Alfred Lewis
Rick & Joyce Miller - 4164 37th St Apt 8 - San Diego, CA 92105
the Henry Mittensweis- 405 Date Street Imperial Beach, CA 92155 (HONORARY)
Grace Brophy - 2342 Via Siena - LaJolla CA 92037 (Complimentary-Ass'tEd CAGarden)

TREASURER'S REPORT

Well over 200 members - we're still solvent.
San Diego people -- please pick up your membership cards at the meeting.
See Warren Buckner

****

* PLANTS OF THE MONTH *

June
Succulent COTYLEDON UNDULATA
Cactus OREOCEREUS CELSIANUS

July
(C) Espostoa lanata (S) Echeveria crenulata

August
(C) Ariocarpus fissuratus (S) Crassula (Rochea) falcata

****

NOTICE: Next month's meeting will be July 12th -- Annual POT LUCK at Taylor's hillside heaven in La Mesa

REMINDER - Call Ed Miller (264-8552) for info re June 12th trip by bus.

****

Espinas y Flores
2201 Fairfield Street
San Diego, Calif. 92110