



# ESPANA Y FLORAS

It's GO GO GO: in NOVEMBER

Our own regular meeting, the last in Floral Building, is the 6th...our board meeting the 12th...but don't miss Floral Association's booth in the "fleaMarket" in Mission Valley on the 7th--they are featuring dish-gardens arranged with succulents! Coronado's Crown Garden Club is having a Flower Show at the Women's Club on Silver Strand the 13th (and 14)...The Epi Society meets on the 10th...Floral Association's regular

meeting is the third Tuesday....Whatever your gardening interest, San Diego has a Society for it.

The Natural History Society is giving a course on the DESERT (Wednesday nights for 5 weeks with field trips) (worth 2 units!)...3rd evening on the 3rd...Borrego on the 13th...If you REALLY want to see the REAL desert...if you are a Baja buff... contact Crtez Travel for an overland trip to La Paz leaving the 27th for nine days--you fly back--or fly down and ride back on the 12th...

\* \* \* \* \*

SLATE FOR OFFICERS for 1972 WILL BE ANNOUNCED AT THE MEETING

\*\* \*\* \* \* \*

A DRINK from the DESERT ....2 & 3	CACTOPHIL's OBSERVATIONS ..... 9
OUR ENDORSED JUDGES (CSSA) .... 3	Doc Vaughan Writes - LIFE .... 10
Plants of -- STAPELIADS ..... 4	From SARASOTA to SAN DIEGO .11&12
the Month - M. BOMBYCINA ..... 5	the MAILBAG ..... 13&14
NELLIE'S ROBINS ..... 6	NIBBY's NOTEBOOK ..... 15&16
"NO CACTUSLAND" .....7& 8	DESIDERATA II (unnumbered).....
supplement PN 1&2 - MEANING OF CACTUS PLANT NAMES	
On the very back - INFORMATION PAGE	

\* \* \* \* \*

OPENING CEREMONIES for C A S A d e l P R A D O on the 14th!!

## A D R I N K f r o m t h e D E S E R T

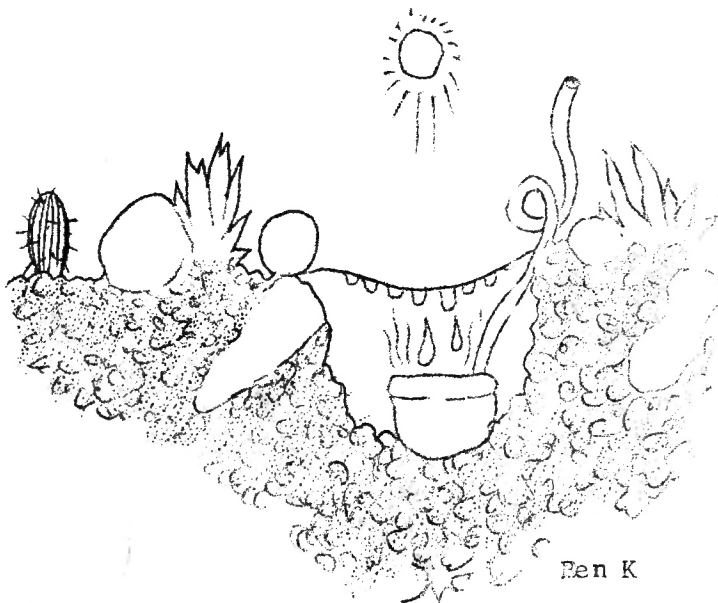
Few desert travelers today are like the hardy prospectors of years gone by. People of all ages and from all walks of life go to the desert for recreation. The desert is beautiful and interesting, but to the unwary traveler who finds himself stranded without water, it can be a nightmare - and a killer. Lost, thirsty...with nothing but cactus for company, he may think it impossible to find water.

Actually, the Ancient Mariner's words, "WATER, WATER, EVERYWHERE, NOR ANY DROP TO DRINK" are usually true - even in the desert. There is, almost always, water in desert soils and always in living plants. The trick is to get it! With a plastic film, a person can build a simple solar still and get a drink of water from the desert soil and plants.

All the necessary parts for the "survival still" can be carried in a pocket. These parts are a piece of clear plastic film, aluminum foil or other waterproof material to use as a container, and a plastic drinking tube.

To make the still, dig a bowl-shaped pit about 3' across and about 2' deep in the soil. Use the small piece of plastic film or aluminum foil to make a container in the center of the hole. Put the drinking tube into the container and bring it out of the pit.

Arrange cut pieces of cactus or other plant material in the pit, around the side of the pit, and spread the clear plastic film over the top. Place soil around the edge of the plastic to hold it down and then put a rock (about the size of your fist) in the center of the plastic. Push downward on the rock until it is about one foot below the soil surface. The rock should be directly over the container. The still is now complete. Just wait a while for a drink...



Ben K

If the sun is shining, water droplets will form on the bottom side of the plastic film in about 30 minutes. In about an hour the droplets will start running toward the point of the cone and fall into the container. In 3 to 4 hours, about half-a-pint of water will be in the container. During the day about two pints of water will collect. During the night about one pint is a typical yield.

Most clear plastic films will work in a solar still. However, some types are considerably better than others. The film should be clear, strong and wettable. Being wettable means that waterdrops that form on the underside of the film will cling to the film as they run to the point of the cone. On a non-wettable plastic, the drops will form, but many fall off before reaching the point of the cone, thus reducing the amount of water which is caught. Polyvinyl fluoride films are satisfactory for these purposes.

The still works well in desert areas where sunlight is abundant and where there is some water in the soil, or where fleshy plant materials such as cacti are available. However, it works equally well on an ocean beach or in areas where water is abundant but polluted. In an area without vegetation and without

## SUCCULENT-OF-THE-MONTH (OPEN)

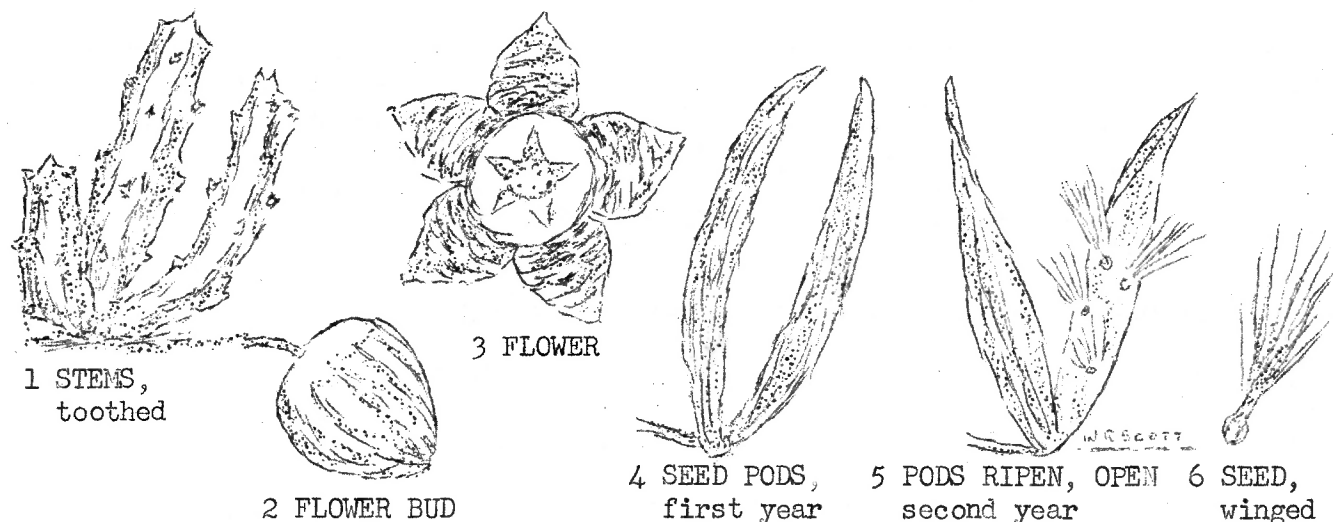
STAPELIADS---ASCLEPIADACEAE FAMILY, MILKWEED FAMILY, STARFISH FLOWER, by Floyd Gable

STAPELIADS are a division of the ASCLEPIADACEAE FAMILY, often spoken of as the 'milkweed family' which consists of nearly 250 genera and more than 2,000 species. It is native to many parts of the world.

The stapeliads consist of twenty genera in all with about 375 recognized species. The plants range in size from tufted dwarfs an inch or so high to some which are several feet tall such as the Carallumas, Hoodias and Trichocaulons.

Some of the better known and more commonly cultivated stapeliads are the Stapelias, Huernias, Carallumas, Duvalias, Hoodias and the Trichocaulons, all of which have the typical star-shaped flower. All have interesting and beautiful flowers but most have a very disagreeable carrion-like odor which attracts blow flies. Blow flies are attracted even as the flower opens and in a matter of hours the inner deep portions of the flowers may be laden with fly eggs. The flies effect a complicated pollination. The young hatch but soon die of hunger as the flowers provide no food.

The Swedish botanish Linnaeus who lived from 1707 to 1778 established the



STAPELIA VARIEGATA by far the commonest.

genus Stapelia in his "Critica Botanica" published in 1737. He named the genus after the Dutch botanish-physician Johannes Badius Stapel (sometimes referred to as Stapelius or Von Stapel) who practiced medicine from 1625 to 1636. He had a wide knowledge of botany and his untimely death prevented the completion of his vast botanical works. He devoted a section to stapeliads in which he called our well-known S. variegata "Fritillaria variegata" because the flower resembled F. meleagris which refers to the checkered markings on the flower petals. F. meleagris is in the Lily family.

The Stapeliads are nearly all from arid regions of Africa, Arabia, India, Ceylon, Palestine and the Island of Sumatra. The first thing a collector or grower must learn is NOT to water too generously, and that is an understatement.

Cultivation of Stapeliads is a challenge to the collector of succulents, Not all species are easily domesticated while other species like S. variegata (above) S. gigantea and S. nobilis and others grow easily.

Some species are very difficult to grow. They are demanding with respect to soil mix and watering. Included in the group are Tavaresia grandiflora, Caralluma sucatrana, Eithcolea grandis and all the Trichocaulons. The last named group represents too much humus and requires very little water and a free circulation of air about the plants and roots.

STAPELIADS--continued:

Most stapelias thrive in a very light, sandy compost with leaf mold and some peat. Most will take moderate water which serves to keep the roots alive. In the fall and winter after the flowering season they become very water sensitive.

The difficult species are well worth the extra effort and care required as some of them are the most interesting of all the succulents.

REF: CACTI & SUCCULENTS, Haage; HORTUS II, Bailey; EXOTICA; BOOK OF CACTI AND OTHER SUCCULENTS, Chidamian.

CACTUS--OF--THE--MONTH  
MAMMILLARIA BOMBYCINA

Floyd L. Gable

MAMMILLARIA BOMBYCINA (bōm-bīs-ī-nā) comes originally from Coahuila and San Luis Potosi, Mexico. This particular species of "mam" is regarded by many as one of the most handsome of the genus.

Spination is most attractive, the short tubercles produce dense tufts of white wool in the axils. The tips of the areoles, or the spine portion of the areoles, bear 30 to 40 spreading, white silky spines about three eights of an inch long. The four radial spines are reddish brown or yellowish and they are three quarters inch long and they contrast beautifully with the glossy white marginal spines. The central spine is longer, brighter in color and sharply hooked.

Scarlet flowers, described by some as "clear red", are freely produced. They appear in profusion like garlands at the crown of the plant.

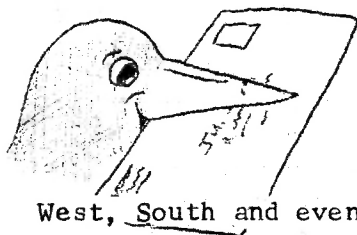
The plant clusters freely and each plant may grow to about two and a half inches in diameter. They are at first globular, later becoming cylindrical, eventually branching and clustering and becoming conspicuously tufted.

M. bombycina is a joy to have and to grow as it is one of the most lovely of all the mams. It perhaps is the one which is easiest to grow. It thrives very well in an average light cactus mix. It takes generous watering during its growing season. It will take full sun, but if it is potted it may do better in semi-shade. It likes a balanced, liquid fertilizer at about one-half strength once a month from March through September. It will thrive and bloom freely in a four inch pot when young, but as it grows older and larger in about three or four years, it will of course require a larger pot.

REF: POCKET ENCYCLOPEDIA, Lamb; CACTI & SUCCULENTS, Haage, EXOTICA.

WHAT MISSING POINTS? You noticed, didn't you, there was no sketch to accompany Mr. Gable's MAMMILLARIA BOMBYCINA. The art department of Espinas y Flores threw up its collective stencils and styli (styluses to you who think cactuses) when the assignment was dropped in the "incoming" box. They termed it "Mission Impossible" and they said loud and clear "It can't be done--even Tony D'Attilio couldn't draw that many spines on ONE sheet of paper" while admitting he could put countless pen strokes in a small area. They referred us to the Photo Department. And what does an Editor do in a case like that? Got an answer in your Notebook, Nibby. You'll find us in the photo department until Mr. Gable chooses MAMMILLARIA UNASPINA for plant/month.

IT'S GOING TO BE A GREAT DAY IN SAN MARCOS ON NOVEMBER 21st. Mr. President Mitch Beauchamp says: "Yep, that's right--it's going to be DR LYMAN BENSON DAY." Dr. Benson will be speaker at Palomar's meeting and his subject will be "Color in the Southwestern Deserts". No one, absolutely no one, could do it better. We will be seeing you in room F-22 at 1:30 p.m. on Saturday, November 21st.



# Nellie's Robins

Nov '71

Did you know that robins fly North in the Fall? -- Also East, West, South and even across the Atlantic and Pacific. ROUND ROBINS, that is!

For dyed-in-the-wool or stuck-in-the-finger cactophiles, a Robin is an excellent way to broaden your knowledge, make new cactus friends and increase your collections, all for the mere cost of the postage.

How does it work? First, you must be a subscriber to the Cactus and Succulent of American JOURNAL. Then, write to Gladys Panis, Post Office Box 505 - Falmouth, Massachusetts 02541. Tell her what sort of Robin you would like to join, and that you are a member of CSSA. There are not always openings in a particular Robin, but if enough people ask she will start a new one.

For a better idea, see "Spotlight on Robins in the JOURNAL. Usually a Robin has 6 to 8 members. Each in turns writes a letter; when the Robin arrives, add your letter to the others and send them on their way to the next person on the list. When the Robin comes around again the old letter is removed and a new one is inserted. Soon private correspondence is started on the side and little boxes of cacti and succulents are exchanged through the mail.

Another interesting sidelight is how a Robin affected the circulation of our own ESPINAS y FLORES. Through mention of EyF in the Ozark Gardens MAGAZINE, Alice Kyzivat of Brookfield, Illinois, subscribed and mentioned the fact in Rebutia Robin #1. Eileen Harris in England asked if it were published in English. Martha Van Ness of Pacifica, California, asked if it would be worth while to subscribe. On receiving a sample copy, she wrote that both she and Miriam Budress of San Bruno were subscribing and were sharing the cost of a subscription for Eileen. I subscribed for Billie Lucas of Gymnocalycium Robin #2 because there was no cactus society in Monterey, California. Later, I sent a subscription to Ray Sharman in England (also of Gymnocalycium Robin #2) as a small repayment for the many cactus offsets and seedlings received from him.

So that is how the Round Robins wing their way merrily around the Globe, with ESPINAS y FLORES not far behind.

by Nellie Kennett

(NOTE: See Perlso Lewis to subscribe to CSSA JOURNAL -- or Ruth Nelson or Nellie Kennett or the Scotts -- but DO subscribe.)

We noticed in a recent JOURNAL that Lauron Lovelace had joined a Robin...who else? The present editor belonged to the Windowsill Robin once upon a time in Illinois...Gladys Panis was a member of it and I've meant to write to say hello for the two years past. Thank you, Nellie, for sharing your experience with us -- it's a fascinating glimpse into how our Society acquires new members. It's really DELIGHTFUL!

(OBSERVATIONS continued) (from page 9)

What time of day should you water? My preference is for later afternoon or evening. During the day the moisture in the soil rises, and presumably it also rises in the plant. Water applied at the end of the day will sink to the bottom of soil, to rise during light of the following day. If the surface of the soil is dry in the morning, you may consider it an indication to water the plant that evening.

# CHROMOSOMES AND THE CACTOPHILE <sup>Nov '71</sup>

All living organisms require a design for growth and development. This design is biochemical and is regulated by genes. The actual nature of the gene is an academic point and suffice it to say that genes are located on chromosomes. Each living cell has a set of chromosomes which are able to duplicate themselves as the cell divides. This process is called mitosis. The majority of plants (and animals) have a diploid set of chromosomes (abbreviated  $2n$ ) in their somatic or body tissues.

Special reproductive tissues divide in such a way that the normal complement is halved. This process is termed meiosis and the half set of chromosomes is abbreviated  $N$ . This haploid set occurs in ovules and spermatocytes.

Much information can be learned by observing chromosomes. The active tips of roots provide good mitotic ( $2n$ ) tissue where the diploid number can be observed. The numerical relationship between the chromosomes of different species is helpful in determining evolutionary origin or phylogeny of the species.

Observation of developing pollen or ovules reveals the haploid ( $N$ ) number. It is here that chromosomal rearrangements within the individual plant can be observed. Crossingover of chromosomes gives various characteristic patterns whose interpretation gives the cytogeneticist a clue to the origin of the individual and the relationship of its parents.

The initial preparation of plant material for cytogenetic work is quite easy. The material is preserved for at least 24 hours in a freshly prepared solution, 3:1, of 100% ethanol (drinking alcohol) and glacial acetic acid (smells like vinegar). The best time for collecting material varies, but usually early morning collections will have more dividing cells than afternoon or evening collected tissue.

Flower buds should be collected at an early stage in development and if the material is unfamiliar, a range of development types will show the best stage. Fully open flowers are much too late but can be used in determining pollen fertility. The preserved material is next stained in a suitable stain, probably aceto carmine, a red stain. After a few days the material is removed for the stain and stored in a 70% ethanol solution. Standard observations are made using a conventional light microscope.

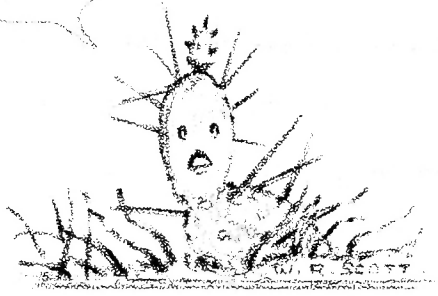
The chromosome numbers of many cultivated plants are unknown, especially those of cacti and other succulents. The large collections of unique and rare plants amassed by the cactophile provide the cytogeneticist with excellent material, especially field-collected plants with complete collection data. Unfortunately, there is no collection system in operation for preserving chromosomal material for future investigation and the usual case is for an investigator to run down his own material, often wasting time and much of the money from his NSF grant!

R. Mitchel Beauchamp

Department of Botany  
San Diego State College  
(San Diego, CA 92115)

(When Mitch sent the article - in answer to a note I had made about "pickled chromosomes" - he said he hoped it wasn't too technical.... It was for me -- but not for all those professors Out There! Thanks, and we'll see that you get the missing issues you need of EyF.)

I remember hearing Grandpa reminisce about his youthful pranks in Indiana in the early days. He said he used to hide in the tall grass to catch a ride on an unsuspecting cow's tongue.



OPUNTIA FRAGILIS III


Mr. Walter R. Scott  
3430 Wilshire Terrace  
San Diego, California 92104

Dear Walter:

Our deepest apologies for being so late with this article. It, unfortunately, was part of a very long list of things that needed doing this summer, a great part of which still are not done because of lack of time.

Because of the lateness of the article, because of our lack of technical knowledge of cacti and because we were only with the Gays for a portion of their field trip in Mexico we felt we should not attempt anything on this. There are others better qualified who could write a much more interesting and more informative article. We thought perhaps the contrast in what we experience as cactophiles compared to what a Southern Californian experiences might be of a little interest.

We do want to thank you for your friendliness and courtesy to us at the convention and for sending us "Espinas y Flores". We certainly hope that time and circumstances bring us together again. In the meantime we will continue to enjoy your amusing drawings in the Journal.

Sincerely,  
  
Donald E. Keirn

September 18, 1971

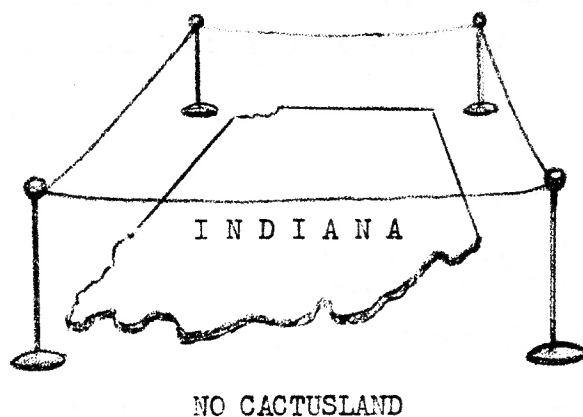


## "No Cactusland"

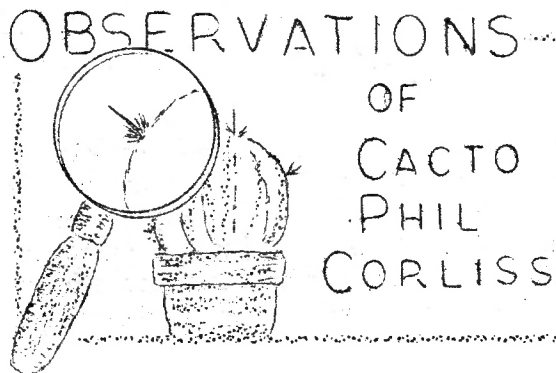
Our Indiana could well be called "No Cactusland". Supposedly a native *opuntia* grows somewhere within the states boundaries but we have never seen it. Indiana doesn't have a nationally affiliated cactus club and, to our knowledge, not even a non-affiliated group. Our winters usually have some sub zero temperatures and our summers are hot and humid with an average of about 1" of rain per week: conditions not exactly suited for the existence of cacti.

However, all these things only tend to make collecting and raising cacti even more exciting for us. What a joy it is to spend a cold winters night in our small cactus solarium, with the snow swirling about outside, dreaming of a collecting trip to Mexico. And what a thrill to have these dreams turn into reality. A year ago we did spend two unbelievable weeks in Mexico collecting and photographing cacti and meeting the wonderful Mexican people. This year we were able to attend the Cactus and Succulent Societies convention in El Paso; then joined Ed and Betty Gay and group on their field trip into Mexico. To a southwesterner this is "old stuff" but to us from "No Cactusland" this is what dreams are made of. It helps make today a little easier and tomorrow a little more desirable.

Mary and Don Keirn







### HOW OFTEN SHOULD YOU WATER YOUR CACTUS PLANTS?

How much water should you give them?

How often should you fertilize them?

What is the best time of day to water?

The amount of water needed by cactus is tempered by many factors. Always remember that **TOO MUCH** water is worse than **TOO LITTLE**. If in doubt, don't water! The succulent plant is uniquely able to survive for long periods of time on its stored water, but desirable growth and bloom depend on adequate water and fertilizer.

What harm is done by too much water? The soil may become waterlogged and air is unable to reach the roots. All parts of the plant may become swollen with absorbed water resulting in bursting of the roots or skin, permitting entry of disease resulting in rot and death.

The safest regime is to allow the soil supporting **MATURE** plants to dry out between waterings but to keep **SEEDLINGS** growing in moist soil. Temper your practice by remembering not only that in most habitats there is some moisture rising from the depths or available from low clouds by absorption through spines, but also that these plants whose root systems have become very dry from long spells without rain can respond quickly when rain does come.

It is, of course, axiomatic that more water will be needed when the humidity is low and/or the temperature is high. Conversely, less water is needed when the humidity is high and/or the temperature is low. Evaporation is increased with low humidity and growth (utilization of water) is slower with low temperature.

Certain genera are especially susceptible to over-watering. You must learn to recognize these by reading or by experience. If you cannot resist water such kinds, you will be wise to graft them on stock that will accept the amount of water you use.

Your soil mixture, either in the ground or in pots, has an important bearing on the amount of water you should give. Very porous soil with excellent drainage is always recommended -- but of course it requires more water -- or perhaps I should say it will **PERMIT** more water.

The size of plant and pot is also important. A small plant cannot absorb much water. The smallest pots are prone to dry out rapidly while large pots may take and hold too much water.

Remember that unglazed clay pots dry out faster than plastic pots. Plant roots in clay pots tend to seek the walls of the pots, which is said to be because in unglazed pots they receive air through the porous walls. The wall areas of unglazed pots are seven degrees cooler than the center because of the evaporation of moisture. If you need to conserve heat and to cut down water so often, use plastic pots.

Some authorities say that in hot weather cactus may be watered every day! I do not subscribe to this advice, at least not for the kind of watering I think is best - a complete soaking of the soil after it has been allowed to dry out. You may use a fine spray or mist every day, however. If this is a frequent procedure you should use rain water or at least some type of water with a low salt content.

**HOW OFTEN TO FERTILIZE?** In growing periods I like to use a soluble fertilizer with every watering -- a small amount each time rather than a few heavy applications each year. Certain cacti, however, notably many of the mammillaria, will not bloom if fertilized - even buds ready to open will regress. A formula rather high in phosphorous and low in nitrogen is best.

(continued elsewhere) (page 6)

# DOC VAUGHAN WRITES ABOUT LIFE

Only recently has man awakened to the knowledge that he is not alone drinking from the well of LIFE. The greatest trees or largest animals are created from the same source that brings forth the lowest micro-organism of the soil or sea. The ant burrowing through the garden soil unknowingly is aerating the soil, assisted by worms and nematodes and bacteria and countless micro-organisms that each are symbiotic unto the other. Without the least of these the mighty redwoods would never stand on yon headland looking westward to the sea.

Little does the bee know that he not only seeks nectar from some freshly opened flower in the glen, but has a job to do in the help he must give the flowers to carry on the LIFE cycle.

The invisible choir that has nested the night through cradled in the tree top starts his search for some unwary larva or newly hatched insect and possibly to carry pollen to some waiting fruit tree, little understanding that later some man will crunch a juicy apple or scented orange as the heat of noon bears down, and he rests from his agarian labors.

Man alone did not inherit the EARTH. Every animate thing has had its part in the joy of building LIFE. Even the inanimate had their job in rendering asunder the stones by freezing the rains within the crevices of mighty rocks and reducing them to soil. The winds at times ferocious in fearful fury made stones into loess and cast it afar over the deltas of mighty rivers and made the bountiful deltas of the Nile, Ho Hangho, Amazon, and Mississippi.

In PEACE down through eons of TIME the world was balanced by DEATH and the REBIRTH of these components of LIFE. The foul gases we call carbon dioxide, sulphides, etc. were cleansed by the stomata of the leaves of the vegetable kingdom. The lowly weeds united the soils to the face of the earth in valley and on mountain so that the plants would have a place to grow and bring forth their kind.

Through the night sessions the stomata filtered the carbon from the gases and gave the air back its OXYGEN, keeping for itself the carbon. We many times forget that ninety percent of the tree or plants carbon comes from the air. The vast orange groves gave to Southern California the ONCE clear fresh air we so enjoyed. As man moved relentlessly across the land, slashing, burning, building homes and roads, polluting rivers and lakes and even the sea, he was writing his own DEATH warrant and the TIME to collect is closer than we can know.

Each of us is truly his brother's keeper. The trees are just as much part of life as any worm or bee or butterfly. The tides rise and fall each day in earthly rhythm. As the moon passes over our tiny sphere the earth breathes by swelling and contracting. My small fishing boats at anchor at their moorings rose and fell and with each small wave and at each passing of a wave gave forth life-like inhalations and exhalations. Even the greatest ocean-going liner breathes. So we are part of all the CREATION. We are driven by the same electrical magnetic force that drives all creation. Therefore, we are but a spark of light from the INFINITE.

It was written ----- SHOLON.

-- Doc Vaughan.



YOU MAY IF YOU TRY. YOU CAN'T IF YOU DON'T.

# from Sarasota to San Diego

THE SARASOTA SUCCULENT SOCIETY of Sarasota, Florida, commemorated their 10th anniversary in 1960 by publishing a booklet of how they came into being. In their case, their garden came FIRST, back in 1938...shall we read in part from THE STORY OF OUR GARDEN...

"To envision the first beginning of our garden, we must look back through the scores of years to the times when the Seminoles possessed this land. In those days the God of Nature was the landscape architect, setting in place the vast array of trees and shrubs and herbs and grasses which moved explorers to call the land "Florida" — the Land of Flowers... Native growth was the attraction: magnificent live oak, palm, viburnum, elm and particularly palmetto, which had learned to stand upright to keep the bud above the flood... The soil was firm under foot. The purchase was made. The purpose was to develop a garden preserving as much as possible of that Florida for which the Seminoles fought so many battles.

However, the bank of marl and rock lifted from the brook demanded the making of a rockery and various plantings were tried. In 1947, an experimental planting of Succulents proved so pleasing that other Succulents were added from time to time. In 1950 a booth of Succulents was featured at the Spring Flower Show. It was at this booth, while gossiping about plants, that it was decided to form a club for study and experiment.

Most such groups have employed the word "Cactus" in selecting a name -- but it seemed inappropriate for use in Florida. Also, "Succulent" is much more comprehensive."

A member, W. G. Sparkman, offered the use of his rockery and they were off! They secured a club room for a rental of ten dollars monthly, had rummage sales to raise funds, and swung a \$2,000 purchase to buy the land on which the Experimental Garden was located. In addition, they undertook the involvements of becoming a tax-free institution.

An outstanding achievement was the final and full repayment, in four years, of the ten-year loan for the purchase of the Experimental Garden. In order to take title the Society needed legal status...a charter was prepared and given Court approval, creating the Society a non-profit corporation under the law of Florida. Acquiring legal ownership gave the Society an unique status among horticultural clubs. "So far as I know, this is the only club of its kind in all the world that owns its own garden." - Ladislav Cutak of Missouri Botanical Garden wrote.

## WORTH

We can curse the fate that made us.. or love each living hour...if we do the job God gave us... be we humble weed or flower.

For each of us is needed...and each of us has worth... or He never would have bothered ...to honor us with birth.

There is fragrance in the roses...and shade beneath the pine...and softness in the clover...and food upon the vine.

And each one serves a different need... just as you and I... be we creeping in the valley ... or climbing to the sky.

(M. Buxbaum)



Mrs. Zimmerman of THE SARASOTA SUCCULENT SOCIETY wrote to the Editor last month. To quote from her letter: "To plan a botanical garden for the enjoyment of the public and members is a challenging and exciting project, not only for its aesthetic value, but educational and research potentials. I wish you a happy fulfillment of your dream. Emerson says, 'Thought is the seed of action'.

"In 1965 we obtained the remaining Sparkman property which enlarged the garden to one acre. This gave us a botanical garden of succulents, cacti, native trees, vines and shrubs, and a variety of crinum lilies. After Mr. Sparkman's death in 1968 we remodelled his house to enlarge the meeting room with kitchen and converted the rest of the house to a n apartment to rent or for the caretaker's use.

(SARASOTA SUCCULENT SOCIETY continued)

We have on the grounds a propagating house, slat house, tool house, a covered sales structure and an exhibition section. We have 16 beds or plots - several miscellaneous beds, the rest beds of one family - such as the Agave plot, Aloe plot, et cetera. Ferns and bromeliads and hanging baskets make another attractive area in the garden.

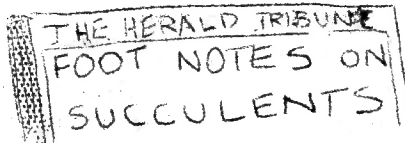
In the garden we have 15 succulent families with hundreds of species. As a botanical garden it is small but comprehensive, a lovely spot with a charming and peaceful atmosphere in the midst of the hustle and bustle of an active city.

Mondays the garden is open to the public free of charge. We have on an average 20 visitors a day. All are enchanted with the garden and many buy surplus plants. The work of the garden is done by members who volunteer their time, and we have a gardener one day a week.

The Society is a non-profit organization with Federal tax exemption, because of the educational and research experimental garden in the field of succulents. Students from the elementary grades through college level come to the garden to observe and study the plants. We hope to increase educational projects in various ways.

We do furnish program speakers to other organizations interested in knowing more about succulents, and our monthly programs are open to visitors. Our research includes experimenting with soil mixtures for best results in growing succulents in our area, and introducing new specimens. We hope to increase and widen our research activities.

In 1964  
column in the Sunday  
newspaper, THE HERALD



I started a weekly  
edition of our local  
TRIBUNE. I called it

The column was open to any member who wished to contribute an article. A few of our members did contribute and I edited and illustrated the articles. They have been a contribution to the HERALD TRIBUNE ever since. Many of our visitors came through the "FOOTNOTES", and a number each year became members of the Society, so the feature has been valuable.

Our membership is now close to 100. Of course down through the 21 years of its existence members have passed away or dropped out for various reasons, but we continue to grow. I hope this brief summary will give you some ideas. Our dues, donations, plant sales and Ways-and-Means projects support the garden. We have three kinds of membership: Active - Associate - and Honorary.

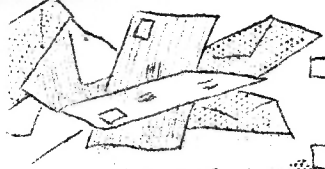
Do write if you have any specific questions.

Sincerely,

Mrs. John C. Zimmermann  
8015 Midnight Pass Road  
Sarasota, Florida

*Sarah A. Zimmerman*

(More in the December issue about FLORIDA CANYON from Helen Whitham who is vacationing in Florida...our own SAND & SOUL GARDEN in the Park... and extending our garden at Mission d'Alcala ... hopefully...)



# Mail Bag



Nov '71

30 September 1971

Dear Madame,

I thank you very much for your letter of 20th August, that I received on 18th of September.

I have been a chairman of our club which has 105 members. We have state organisation of cactus growers called Svaz českých kaktusářů — that means Union of Czech cactus growers... In the whole there are 2100 members organised in our country.

The name of our club is "Union of Czech cactus growers, fundamental organisation in Olomouc". The members' meetings take place every month, always on Sundays forenoon. The meetings are arranged by committee of eight members. We set for excursion to significant cactus growers to have a look at their collections and eventually to buy some plants during the summer season... In the other months we meet together at a beautiful, spacious hall of the Institute of homeland study.

At the meetings we are in the habit of having lectures by known cactus growers from Olomouc, we project lantern slides, we change mutually cactuses and seeds. The meeting lasts usually three hours, with <sup>out</sup> serving refreshment.

As to literature, there is published a state Journal, "Kaktusy 71" (Cactuses '71) in our country that comes out five or six times a year. Each issue has about 50 pages.

Some members also get foreign magazines, mostly German but sometimes Dutch, French, American or Mexican. We get rarely foreign journals. As a rule only those get them who have relatives or friends abroad because it is not possible to subscribe in foreign exchange, neither in Czechoslovak currency. Even so, it is impossible to buy seeds or plants which have been described in foreign journals.

Only those are lucky, who have relatives or friends, who can pay and send seeds or plants. Here we used to have only seeds of current kinds, gained from cultivated plants, while you can gain them direct from habitat of plants. There are only few people in our country who can get discovered and described plants by above mentioned way. I should like to be among the lucky ones!

Let me tell you a few words about myself. I am 73 years old. I have two married sons and five grandsons. I have been 13 years retired. From time to time I get a job because the pension is not so high as to afford such a hobby.

I hope that I answered all your questions — at least I try to make you acquaintd with our conditions of living. Please remember me to Doc Vaughan, Mary McDowell and to all members of your Society.

Yours sincerely,

Ferdinand Plesnik

\* \* \* from Whitman College, Walla Walla  
October 8, 1971

Dear Nibby Klinefelter,

Thank you for the address of the Portland, Oregon C&S Society. Now could you please forward the enclosed letter to Ruth Nelson?

I am in Sociology, not Botany, alas! I have a greenhouse complex with a few thousand cacti and other succulents. Right now I'm hot for caudiciforms, but in general, I dig any globular or cereoid cacti. Sclerocacti are well represented as are other cold-desert cacti.

I'm presently involved in two research projects, consulting and part-time evening teaching besides my Whitman job and being faculty resident in the dorm. I'm looking forward to writing an article for EyF but not for a while.

EyF has been improving lately. I am always glad to see it come and will love to help when my schedule calms down. In the meantime, I promise not to transsexualize you again.

Thanks, Lee — it isn't every day that the Ol' Editress gets a promise like THAT!!

Best wishes,  
Lee H. Bowker

We all know what it's like to visit a nursery, but did you ever know of a nursery going on a collecting trip? Three real live, discerning, knowledgeable professional cactophiles from Riverside County drove southward into San Diego County September 9th, looking for interesting and unusual plants.

The natives in this County incorrectly believe there has been nothing new here since Britton and Rose, but not so with this extraordinary trio. The caravan covered the County very well considering that it was a quick trip with stops at Fallbrook (George Lindeman's), El Cajon (the Taylors), San Diego (the Scotts), and Spring Valley (Cleoves Hardin).

Collectors and particularly nurseries have in mind a plant family when they head out, but not this trio. They didn't overlook anything. Theirs was a professional plant reconnaissance; they knew their business. It was something like Bill Cody hunting Buffalo and returning home from the hunt with eagles, jackrabbits, driftwood and a couple of bears!

The nursery that came collecting was THE DESERT NURSERY — Mrs. Halvorsen, Ted Hutchison and their enthusiastic "Gal Friday" Anna. What a wonderful idea they had — take the day off and go collecting!

Walter Scott

(hi-ló-sé-ré-us un-dá-tus) "Forest cereus" Ruth & Bill Nelson

A true cactus of climbing habit; therefore needs some support - wall, fence, or trellis. Will grow quite large, so give sufficient room to spread.

Cutting this size (NOTE: referring to 75 cuttings that they gave at a Heart Association Award dinner several years ago) will normally bloom in two or three years if given a good situation and enough food. Blooms in the sun. Cuttings should be allowed to callus over for two weeks or more before planting.

Plant the lower 2" in open ground or planter in fairly rich but loose well-drained soil, having some sand and leaf mold incorporated. If you're not sure about which is the lower end check to see that the spines point slightly upward. Do not put in too large a planter at first — start with about a gallon capacity and then move on to a larger pot as the roots become crowded.

When planting — DO NOT OVERWATER! It can be left without any water at all for as much as a week, then water sparingly until roots are well established. When it is growing well and well drained, it will take frequent waterings. And to get flowers, you need to feed. It's fruit is edible, too. It is a night bloomer and flowers will fade the next day, unless cut when fully open and placed in a jar of water and in the refrigerator away from the freezing unit. Treated this way, a bloom will keep for several days in the refrigerator, or all day out in the room.

Remember the support — this is a plant that puts out many aerial roots, through which it takes in some of its nourishment, and if they are once pulled loose, they will not again take hold.

(How thoughtful to give cultural directions when giving a plant! We could all do that if we would...)

LIBRARIANS' REPORT - 28 Books circulated last meeting. Ruth is pleased that mentioning BRING BACK BOOKS three times in an earlier issue brought back books...even (after a notice sent) an overdue book from The Editress...

Mr. Hardin said that rapid growth of the grafted cactus could easily be proved by switching heads. He advocated warm weather for the experiment. Let's hear about results! Thanks, Cleoves.



by CactoPhil Corliss, with encouragement  
and suggestions from Walter Scott

Like all plants, the members of the Cactus Family (CACTACEAE) derive their names from Latin or Greek words. When the name includes proper names, such as those of persons or places, such names are given Latin endings. Greek words have been changed to conform to the Latin alphabet. The names, therefore, are useful in all lands where the Latin alphabet is used.

Every cactus has at least two names. The first indicates the genus. The second indicates the species. In addition, the plant may be given a varietal name and/or a name indicating its form. The following table shows how these names are derived, listing the derivation in descending order of frequency:

## GENUS

Describer or Finder  
Plant Characteristic  
Habitat Area  
Other

### Examples:

bergerocactus (for Alvin Berger)  
echinocactus (hedgehog cactus)  
arequipa (from Arequipa, Peru)  
nopalea (native name of the plant)

## SPECIES

Plant Characteristic  
Describer-Finder-Honoree  
Growth Characteristic  
Habitat Area  
Other

albispinus (white spine)  
glassii (for Charles Glass)  
procumbens (prostrate)  
texensis (from Texas)  
heterochromus (many-colored)

## VARIETY

Describer or Finder  
Plant Characteristic  
Habitat  
Growth Characteristic  
Other

chileorebutia esmeraldana v.ritteri  
(for Friedrich Ritter)  
parodia formosa v.prolifera  
(proliferating)  
mammillaria johnstonii v.sancarlensis  
(from San Carlos Bay)  
echinocereus papillosus v.angusticeps  
(with smaller parts)  
thelocactus bicolor v.tricolor  
(with 3-colored spines)

## FORM

Crest  
Monstrose

mammillaria bocasana v.inermis cristata  
lophocereus schottii monstrosus



Hybrids: Even when proper names (for persons and places) are used, it is not correct to use capital letters. The only permitted use for capital letters in cactus names is for the names of horticultural hybrids, as in the following examples. Single quotes are correct. The "X" is used AFTER generic names to indicate intrageneric hybrids and BEFORE the generic names to indicate intergeneric hybrids:

- lobivia X 'Jupiter' (cross of two lobivias)
- X lobivopsis 'Aurora' (cross of lobivia and echinopsis)
- X chamaelobivia 'Cognac' (cross of chamaecereus and lobivia)

The endings of adjectives denoting species, variety, or form must agree in gender with the gender of the genus. (Exceptions are those adjectives derived from persons or places and certain other adjectives.)

- Most MASCULINE adjective endings are \* -us
- Most FEMININE adjective endings are = -a
- Most NEUTER adjective endings are = -um
- Examples: grandiflorus grandiflora grandiflorum
- Thus: copiapoa grandiflora

The endings of adjectives to signify more is: -ior (gender immaterial)

- Examples: gracilior = more graceful (or slender)
- robustior = more robust
- spinior = more spiny

The endings of adjectives to signify most is: -issim-

The ending of the adjective must agree with the gender of the genus.

- Examples: spinosissimus = most spiny
- rarissima = most rare
- speciosissimum = most beautiful

The endings of adjectives to signify bearing is: -fer (gender immaterial)

- Examples: acifer = needle-bearing (also: -ger)
- hastifer = spear-bearing
- lancifer = lance-bearing

Endings of words derived from locations include:

- ensis Example: texensis (from Texas)
- ica do arizonica (from Arizona)
- anus do alamosanus (from Alamos)
- ana do bocasana (from Sierra de Bocas)
- a do pacifica (from Pacific region)
- e (after vowels) do jarillae (from Mt. Jarilla)
- nis(after vowels)do guerreronis (from Guerrero)
- na(after vowels) do columbiana (from Columbia)

Note: In obvious cases, endings must agree in gender with noun.

- Thus: pacificus pacifica pacificum

Endings of words commemorating people:

-ii is used for names of men EXCEPT when the name ends in -er, in which case the ending is -i.

- Examples: glassii baumii ritteri
- lloydii goldii fischeri

-ae is used for names commemorating women. Examples:

- winteriae bravoae louiseae theresae saboae

-orum may be used. Gender not indicated. Example: blossfeldiorum

-anus may be used. The gender must agree with the noun. Examples:

- wagnerianus hutchinsoniana dyckianum

-i is used for names of men ending in a vowel. Examples:

- rosei lembckeii

## DESIDERATA II

IN WHATEVER RELIGION YOU HAVE BEEN TAUGHT, HOWEVER YOU HAVE BEEN BROUGHT UP, AND HOWEVER YOU HAVE UNDERSTOOD YOUR TEACHERS...ON THESE levels you will understand and grasp this message. It is not enough that this message be believed.♡♡It is a message to be lived. ♡♡ The essence of Universal Religion is Peace and Truth, with Love for and Kindness to all the creatures of the earth. Now is the time to express this essence in your own life. A beginning must be made, and the place to begin is with and in yourself. You would reform the world? Begin with yourself, brother! The message of the unreformed reformer seldom inspires reformation. ♡♡ The heart of all Religion is love. And righteousness, which is love in action, is the fulfillment of Religion. Love not only family & friends -- for love limited is love denied. ♡♡ Seek peace within yourself and seek, too, within yourself the Divine Breath of Life. ♡♡ Persist in these things! Do not let up for a single moment! Through your faith and through your deeds you shape your life and help shape the lives of others, as well. What a responsibility!♡♡ The Spirit finds in you its agent and also its partner, and to the degree that you are aware of this and act on it, your life is enriched. ♡♡ A revelation will occur to you...a revelation higher than your most exalted dreams. ♡♡ The New Age is coming, and in it there will be a realization of the Oneness of all. Differences between the various Religions will disappear. The good, which is in each of them, will be fused and will become the common goal of all mankind. ♡♡ Know that you have the power to choose! Choose love, not hate; choose gentleness, not violence; choose holiness, not evil! ♡♡ Dare to believe that the Reign of Love & Peace is coming soon! Ready yourself for it! Ready yourself for it with deeds of righteousness! Righteousness is the door-opener, and beyond the door is love. ♡♡ May power divine enter every aspect of your life endowing it with the rewards of material accomplishments, the treasures of purposeful existence, and the eternal light of spiritual achievement!

Found in Old Saint Paul's Church  
Baltimore; the Church is dated 1693  
Written by Max Ehrmann

Want to see something WILD?? Go to San Diego Zoo and look for Wolf Canyon and the Peccary Pits... tell them the San Diego Cactus & Succulent Society sent you... There you will find that some of us have been there afore ye.

REPORT: "Relative to Sand and Soul Activities - the first phase of the Succulent Garden at the Zoo is a bit sparse but it does have color. We will need potted sunloving plants - Aeoniums, Echeverias, Sedums, Crassulas et cetera et cetera... The Cactus Garden is complete with the exception of three large specimens of Ferocactus acanthoides... Pictures have been taken for the ZOO NOOZ publication (watch for it)

Helpful members contributing to the construction of these gardens were Jim Stalsonburg, Frank Brown, Francisco Hahn... Plants came from the gardens of Jim Stalsonburg, Jack Ramay and Helen McCabe."

\* \* \* \* \*

from HOWARD KENDALL MULLINVILLE, KANSAS 67109  
Dear Nibby, Enclosed \$3 for dues in SD C&S. Would like to receive September & October Bulletins.  
Printing, Publishing, Organic Gardening Amateur Radio WA JFV

\* \* \*

(The only thing is, Howard, our by-laws read: DUES SHALL BE PAYBLE Jan 1 ...UNPAID DUES SHALL BE CONSIDERED DELINQUENT after March 1st...NEW MEMBERS JOINING after September 30 SHALL BE CONSIDRED AS HAVING PAID FOR THE FOLLOWING PRIVILEGES of the CALENDAR YEAR...which is a great bargin unless you join the the first of September...ANY way you SPELL it!

Perhaps our flexible by-laws could be amended to distinguish between true "paper" members and those attending meeting OR ELIGIBLE to attend because of proximity...just a little burden for the Treasurer and the Labelmaker and Keeper of the Membership List...

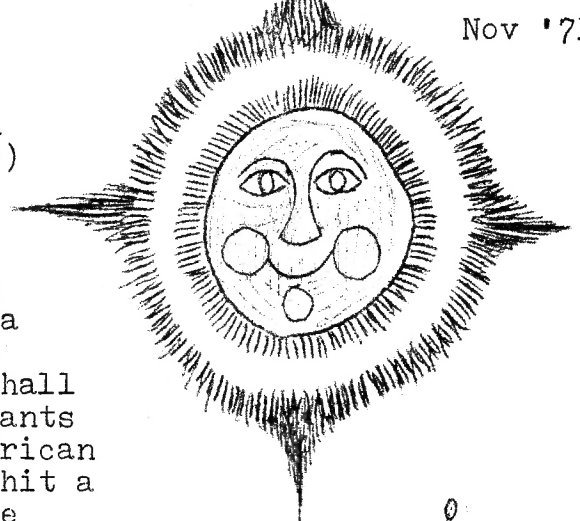
\* \* \* \* \*

Perlso Lewis heard from Miriam Buddress who rejoined after a year's absence...Warren related contents to the Edtress...Miriam moved from the West Coast to Seattle with 400 of her best plants...She said that she is considered "something of an oddity" because she has not yet met any cactophiles...plans to keep up with her hobby with ESPINAS y FLORES as well as Nellie's ROUND ROBINS... (Wanted to call her article GETTING NELLIE,S ROBIN but didn't know how many would get the point of reference...an old cornball play titled GETTING GERTIE'S GARTER...) JS had a note from Barbara Hansen (I think - I can't find it) who hasn't been getting her paper...for a long time, apparently...for thek Spring Valley address dates back two editors ago...as soon as "we" can find the note, Barbara, we will get it all straightened out...meanwhile, WE ARE SORRY...Those things happen in amateur organizations... when a group meets because of a common interest, it is assumed that common pleasure is their goal...not merely the efficiency of their officers...point is, we don't always have maximum communications between officers and members...always meant to write AN EDITORIAL with that theme and somehow it slipped in here...

\* \* \* \* \*

BACK TO THE OL; MAIL BAG...From Kazamichi, Okamoto of Niihama-Shi (city), Ehime-Ken, (ken=prefecture - in this case the NW part of the large island off the eastern part of the Japanese mainland, we received a delightful letter from a collector of 20 years...he is a

businessman, he writes, with two large green houses (6 meters long, 2 high, and how wide?) 200 Cacti in one and 100 succulents in the other. Two small greenhouses (5 meters long, 1.9 m. wide and 0.9 m high) are cultivation areas...at present he is chiefly cultivating Coryphanta, Lophophora and Thelocactus genera --and Agaves as he likes them most... "Please introduce me to your Society's members who shall be interested in trading Agave and Idria plants in exchange for my South American cactus, African succulents or Japanese stamps." (There you hit a Walt-Greenwood nerve!) to continue: "At the Kyoto Grand Hotel in Japan I met Mrs. Lillian Feingold who was a member of your and my society when she travelled in Japan last year. I have been very pleased with the Agaves she sent." We hope to hear more from K. Okamoto.



## NIBBY'S NOTEBOOK

The Mail Bag spilled over into this "feature"... which is only fitting, since I intruded here & there on other pages... Ione is organizing the collating (as she has for many issues) while Ruth & Bill collate and Elaine stamps...and cooks for us...and Benjamin has just drawn another happy sun for us...and done a splendid job of printing back-to-back...far beyond the call to duty... One ambition to be realized before my term is over, is to use EVERY member's name with a knowing and personal touch...but I'll need HELP because I don't know everyone!...Beatrice Norton of Solana Beach celebrated her first year with our Society "recently"...after almost that long remembering what a splendid display of succulents she had seen at the Fair in 1969... Harriet Sopp needs a people-counter for the December meeting --and that reminds us--THINK & BRING BIG for November as there will be NO PLANT DRAWING in December -- HOWEVER, there will be a Christmas gift Exchange ...it was thought by the Board that if you brought a gift that a member of your own sex would like, it would come out even: If you are a woman bring a gift for a woman - if you are a man bring a gift for a man...it isn't necessary to try to determine if you bring a cactus or a succulent... Alice & Wilson Wells have a new address: 8350 Ridge Route Road in Del Serro (SD 92120) - it's on the edge of El Cajon & LaMesa overlooking Mission Gorge...they'll have a canyon full of cacti they can call their own... CALLING on PEOPLE with plants will Wilson Saturday for our two tables displaying SHOWY plants to the public at the opening of CASA DEL PRADO Sunday the 14th...Billy-the-Kid Bishop - have you been on vacation? Call Wilson... Mention of our Society is everywhere - how many noticed us in the "Thanks to" sandwiched in between a bank and a church in the program for PLYMOUTH ROCK the last two weekends in October? There wasn't time for Board approval...or even the Editress's approval ...but I hope we can afford it...the kids had a great time giving the concert at Earth in Pacific Beach... Helen Whitham of the Botany Dept at the Natural History Museum lists EyF as having published her articles, in ENVIRONMENT SOUTHWEST which the Museum publishes almost monthly... Tony is mentioned in several place...The Oct issue has an Exa Wall CACTUS cover... "Ann" of San Diego Office Supply said "Hi" to Marilyn & Lee... she knows you from PTA rather than Tropical Fish or Palm or Epi's...some of us are pretty gregarious...saw quite a number of C&S people at Paul Hutchinson night at Floral...we could have had a Board Meeting...Troy Shipman and Lauron Lovelace are regulars at Organic Gardening...WOW " in that green jumpsuit! Saw Benbow at a Rockhound meeting...Re CALIFORNIA GARDEN magazine - biggest bargain of the year - For 1\$ issues for the years of 1966 - 1967 - 1968 - 1969: These are KEEPERS! Drop a note or call Penny Bunker - M-W-F (10-3) 232-5762.....It's time again...

# ESPINAS Y FLORES



Nov '71

Mailing address: EDITOR Nibby Klinefelter - 2201 Fairfield, San Diego, CA 92110  
TREASURER: Warren Buckner - 1744 Englewood Drive; Lemon Grove, CA 92045 - DUES: \$3 single  
4 family. 50¢ single copy postpaid. Membership includes subscription.

## OFFICERS

President - Ione Hubner ..... 444-3439  
1st VP - Walter Scott ..... 296-6022  
2nd VP - Oliver Loyland ..... 298-3093  
Treasurer - Warren Buckner .. 469-1391  
Recdg Sec'y - Harriet Sopp .. 281-8337  
Corr Sec'y - Perlso Lewis ... 583-9085

## BOARD MEMBERS

Exhibits - Wilson Wells .....222-5141  
Education - Floyd Gable ..... 448-8041  
Editor - Nibby Klinefelter .. 276-6517  
Librarian - Ruth Nelson ..... 298-3349  
Hospitality - Julianne Rice . 234-5487  
Regalement - Hazel Scott .... 296-6022  
Historian - Ruth Richardson . 281-9267  
Past President - Jim S..... 465-6661

## AND

Cactivities Chairman Ed Miller 264-8552  
Sand & Soul - Augie Pfeiffer 288-4444  
Affiliate to CSSA Perlso Lewis  
Rep SD Botanical F'dtn - the Scotts  
Affiliate to CALIFORNIA GARDEN - NK

## PLANTS of the MONTH

### November

Succulent: STAPEDIA family (open)  
Cactus: MAMMILLARIA bombycina

### December

Succulent: SEDUM hintonii  
Cactus: FEROCACTUS glaucescens

## BOARD MEETING

Friday - 7:00 pm - Colina del Sol - Nov 12

## EPIPHYLLUM SOCIETY MEETING

10 Nov

Wednesday - 7:30 pm - Floral Building  
Public Invited

National President of Epi Society featured

## OPENING of

CASA del PRADO BUILDING  
Sunday in the Park - Nov 14th

## NEW MEMBERS CORNER

Jane & George Wilson - 4796 Panorama  
Drive - San Diego, CA 92116  
Howard Kendall - Mullinville, Kansas  
67109  
Lillian & Leo Pickoff - 3002 Sugarloaf  
Drive - Riverside, CA 92507  
Miriam Bুদ্ধress -11616 Second Ave NW  
Seattle, Washington 98177  
James E. Harmon - Imperial Valley Campus  
San Diego State College; Calexico, CA  
Donna & Douglas Buckner - 8561 Dobyns  
Drive - Santee, CA 92071  
Reed Pierce - 3525 Wilshire Terrace -  
San Diego 92104 (291-2028)

Rose's list of REFRESHMENT DONORS: (for  
October's meeting)

Nellie Kennett  
Evelyn Chatham  
Patti Kennett  
Virginia Buckner

You, too, can make this list any month!  
Call Hazel Scott or Rose D'Attilio  
(281-9731)

## SIGN IN with JULIANNE

Ruth Nelson reports EOTANY for GARDENERS  
is still missing...anyone knowing where  
last seen? Card was with book when taken.

## PROGRAM

6 November, 1:30, in the Floral\*  
Building, Balboa Park, San Diego

### "FAVORITE PLANTS"

Mary Biddle - Baby Toes & Lithops

N. R. Steveson - Miniatures

Nellie Kennett - Hoyas

Jean Hapeman - Wait and see....

Julianne Rice - Adeniums

Walter Scott - Mam bocasana, Pedilanthus  
tithymaloides - Devil's Backbone

+plus+

Two Surprise Speakers on "Hawaiian and  
Japanese Gardens" and "Moving Cacti"

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