

CACTOS

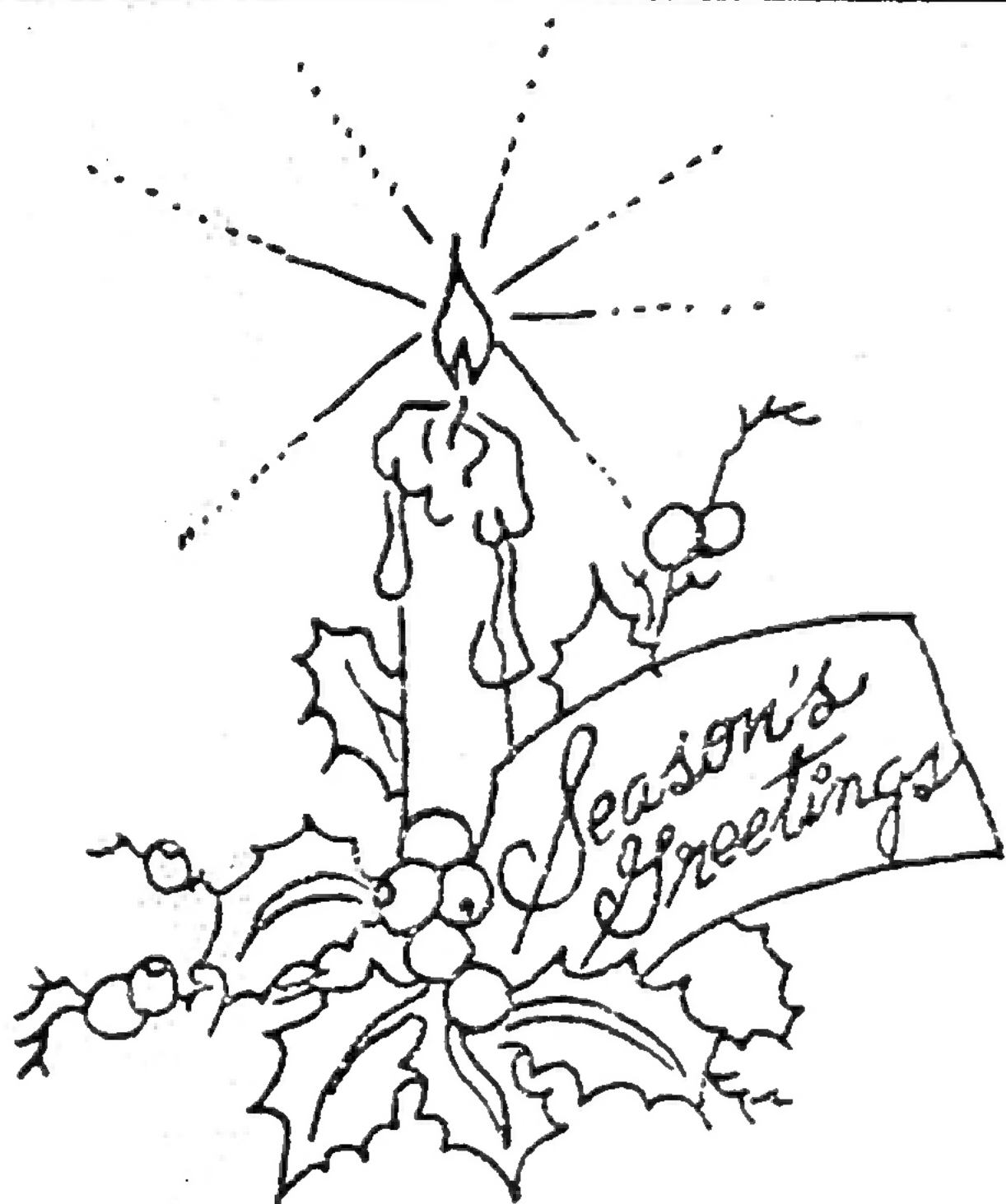
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DECEMBER MEETING

2:00 p.m. at Balboa Park Floral Building, Sat., Dec. 4, 1965.

A Christmas social will be presented by Mr. and Mrs. Hoffman.

Bring potted plants for exchange decorated or covered with brightly colored paper.

A few members have been asked by the Hoffmans to make a number of special gifts to be given away at the plant drawing, a painting, wooden planters, etc.

Officers for 1966 will be elected.

NOVEMBER MEETING

Mrs. Ruth Cuzner and Mr. Robert Nelson presented a slide program on Madam Gana Walska's Lotusland.

Display plants were distributed to members.

DISPLAY CHAIRMEN WANTED FOR FAIR

Now is the time for all volunteer display chairmen to come forward to make plans for the 1966 San Diego County Fair. Thus far, no member has offered to chairman any of the displays.

The Society plans to enter four exhibits again this year, Cacti, Succulents, Rock Garden, and Hanging Baskets. It is necessary to start making plans for all arrangements, plants, etc.

It is too much to expect the same members to chairman the same displays year after year. Chairmen are needed who are free to devote a few weeks of their time to putting up displays before the fair opens. Past chairmen are available for assistance, and are willing to contribute time.

If you are willing to serve as a display chairman, please contact Mr. Ward.

TAYLORS GIVE CHARITY

Mr. and Mrs. Robert Taylor of El Cajon have supported orphanage and welfare projects in Baja California for the past 15 years.

About every two months, the Taylors take clothing, food, etc. south of the border. Items are distributed to an orphanage in the Tijuana River bottom and to poor families in Ensenada and Palmette.

Members may aid the Taylors by contributing used clothing, toys, canned food, etc. Items may be brought to the December meeting or left at the Taylor's Cactus Garden 1640 East Main Street, El Cajon.

ADVICE ON DISPLAY POTS

Most of the display plants distributed at the November meeting were potted in a mixture of sand, peat moss and leaf mold. The sand proportion varied from one half to two thirds of the mixture, depending upon the particular plant.

Basically, the plants are in an almost sterile soil medium. This was done to achieve good drainage and to serve as a starting point for adding nutrients.

Most of the plants are dormant during the winter months and do not need to be watered very often, unless they have been placed in a greenhouse or some other protected location. Since the plants are in an extremely porous mixture, it will be hard to overwater them. During the growing period the plants should be watered often. It is best to deep water rather than to sprinkle; this prevents the alkaline salts from accumulating in the pot.

A fish-oil fertilizer, applied once a month during fall and winter and twice a month during spring and summer (unless summer dormant) will keep most of the plants sufficiently nourished. Remember that the potting mixture is sterile and that plants must be fed.

Most of the plants were planted shallowly, and a layer of rocks, one to two inches deep, was placed on top of the potting mixture to help support the plants, to keep soil from washing out of the pot during watering, and to aid the rapid spread of surface roots.

If you wish to lend other plants for fair display, you may wish to pot them in a similar manner. At past fairs, one of the biggest display problems has been that many potted plants have been placed too deeply in the pot. This has necessitated the removal of the plants from the pots in order to display them. The planting method used on the plants distributed will eliminate the problem. When fair time comes a plastic apron may be taped over the top of the pot to prevent the rock from filling with mulch and sand topping to be used in fair displays.

The decomposed granite rock also serves another useful purpose. It warms up when the sun shines directly on it, giving the plants a higher growing temperature. From my own personal experience, I have learned that pots topped with rocks have grown plants much faster than those without rock. This may not be important in areas away from the ocean, but near the ocean, the plants need those extra degrees of temperature. J. Ward

DETERMINE YOUR SOIL TYPE BY TEST

Sunset Flower Garden Book gives a simple method to determine your type of garden soil.

All you need is a clear bottle or test tube, water and soil from your yard. Take surface soil and add five parts water to one part soil. Shake well and allow to settle for one hour.

Gravel and heavy particles settle first, and the lightest (clay) particles last. According to the Sunset, it is easy to see or distinguish the proportions of sand,

clay, vegetable matter and gravel.

Use the following gage to determine your soil type.

Sandy: if there is 5 per cent clay or less.

Sandy loam: if there is 5-10 per cent clay.

Medium loam: if there is 10-20 per cent clay.

Clay: if there is 25-30 per cent clay.

Adobe clay: if there is 35-50 per cent clay.

EXPEDITION TO PERU

By Dr. Paul C. Hutchison as heard by J. Ward

(Based on notes taken from a slide presentation by Dr. Paul C. Hutchison, at the Los Angeles County Arboretum, Arcadia, Calif., Sept. 12, 1965. Dr. Hutchison is senior botanist at the University of California, Berkeley. Much of Dr. Hutchison's report was given in a dark room which made it difficult to take notes. My apologies to Dr. Hutchison for errors, omissions, and garbled information.)

During 1964-65, I personally fulfilled every cactophile's dream: searching through unexplored wilds in South America for cacti, and finding rare new species.

The occasion was the University of California's seventh General Biological Expedition to the Andes, during which we spend 16 months in Peru and one month in Panama and Colombia. Searching for cacti was only one small facet of the total enterprise, although it held the greatest personal interest for me. Our team was made up of botanists, zoologists, and other specialists. Our purpose was to collect plants, insects, fungi, molds, molusks, fossils, etc.

In addition to the regular salaries paid by the University, our expenses came to more than \$20,000, a rather small amount when you consider the distance traveled, the time covered, and what we accomplished. Of plants alone, we collected 4500 separate species and over 10,000 living plants of all varieties, as well as herbarium specimens of all species for the major campuses of the university. Almost all the cacti we found were rare endemic plants, found only in Peru.

But, it was no picnic. We traveled over 18,000 miles by trucks, partly over a new road built by the Peruvian government into an unexplored part of northern Peru, and partly over areas where there were no roads. In addition to physical obstacles of forest, stream, and mountain, we lost nearly four months in labor due to dysentery, malaria, paratyphoid, and a number of undiagnosed tropical ailments which almost took the lives of several members of the expedition.

All the new species have been housed at Berkeley and Honolulu for study, propagation, and classification. Most of the tender succulents and cacti were housed in Hawaii to guarantee their successful propagation.

We explored higher altitudes and collected cacti between 7,000 and 13,000 feet, and other plants up to 15,000 feet. Many of the plants from the high cold mountain areas should be able to survive in outdoor California gardens in frost areas.

Among the cacti collected were:

- Armatocereus cartwrightianus (a large tree cereus in Peru)
- Boliviocereus
- Borzicactus (new species with pink bloom)
- Browningia (Gymnocereus)
- Browningia (New species with black bloom)
- Cephalocereus
- Espostoa Juancabamba and matucana
- Haageocereus
- Hamatocactus
- Islaya

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EXPEDITION TO PERU (CON'T)

Lobivia
Melocactus (rare species fertilized by hummingbirds)
Opuntia
Oreocereus
Strophocactus
Thrixanthocereus (Probably Espostoa)

Succulent genera other than cacti were:
Balsas (Fern; yeas! a succulent fern)
Bromeliads
Calanthe
Calceolaria
Echeverria
Peperomia (Found up to 15,000 ft.)
Villadia (Sedum group)

The biggest botanical discovery of the expedition was finding more than 50 species of Peperomia. Very few succulent Peperomias were known before our trip to Peru. Most of the new species were endemic to small localized areas of northern Peru at high altitudes, up to 15,000 feet. Approximately 35 of the new species of Peperomia were succulent window-plants. At least 5 of them have excellent commercial possibilities. The remainder may show more in cultivation than they did in the wild, but even they may serve a useful function in producing new hybrid varieties.

Within a few years, you will be able to find some of these beautiful and rare plants in nurseries.

It takes several years for new species to find their way in to nurseries. They are propagated in university greenhouses for study purposes, but extra seed and cuttings are distributed to commercial propagators for experiment and trial marketing. When a commercial grower thinks that some of these have good market possibilities, it takes him several years to produce enough for sale.

Some of the seed and cuttings will be distributed to private donors and to garden clubs helping to support the expedition. The California Cactus Society, Berkeley, and the Sacramento Society donated money and will share in this windfall of seeds and cuttings as they are made available.

When the new cacti and succulents have been classified and thoroughly studied, they will be published in the C. & S. Journal.

USE PLASTIC BOTTLES FOR LABELS

If you use liquid bleach in the white plastic bottles, do not toss them away.

The white plastic may be cut with heavy scissors into any shape of plant label you desire. It is easy to write on and is easy to wash.

Also, it does not become brittle quickly as do many of the commercial plastic labels.

However, please keep in mind

that Doc Vaughn needs your plastic bottles to transport water to dry islands off the Baja coast.

Send articles and other items to Jack W. Ward, 823 Halecrest Dr., Chula Vista, 92010, or telephone 420-5513.

BOOKS!

These books would be worthwhile additions to the personal or to the professional library.

Belden L. Burr.
Baja California Overland.
La Siesta Press.

This work is full of information on plants as well as people and villages. It suggests that an automobile trip through Baja perhaps is not as rugged as many think. This book tells how to do it.

Bally, Peter R. O.
The Genus Monadenium.
\$7.50

Bally gives an excellent presentation of most of the known species of Monadenium, one of the Euphorbiaceae genera.

LAMB, Edgar.
Cacti From Seed.
64 pp. \$1.25.

This is an excellent buy for anyone who intends to grow cacti from seed. Gives valuable information on soil, containers, watering, fertilizers, pitfalls.

Lamb, Edgar.
Stapeliads in Cultivation.
\$5.25.

Has over 100 pages of photographs, plus culture information.

Nel, G. C.
Gibbaeum Handbook.
\$3.25

Covers one of the larger genera of Mesembryanthema. It provides a key to all known species of Gibbaeum. 50 photos and 7 color plates.

Nel, G. C.
Lithops.
\$19.50

Covers another of the Mesembryanthema genera. These are popularly called the "living rocks".

This book has 178 pages of text, 60 color plates, 120 black and white illustrations.

Schwantes, Dr. G.
Flowering Stones and Mid-Day Flowers.
\$15.00

Another valuable work on limited genera of the Mesembryanthema. Many illustrations and valuable cultural notes.

White and Sloane.
Stapeliaceae of Southern Africa.
\$15.00 Three Vols. 1200 pages

Illustrates 349 species of Stapeliaceae with descriptions. 39 color illustrations, 1211 black and white illustrations.

Wilson, Bob & Catherine.
Bromeliads in Cultivation.
\$6.50

This is the only book of its subject in print. Covers succulent and non-succulent species.

Lenz, Lee W.
Native Plants for Calif. Gardens.
\$4.00 182 pp.

This book has 101 photographs of native California plants suitable for all types of gardens.

CALL FOR WORK PARTY

There will be a volunteer work party in the Balboa Park Desert Garden, Sat. Dec. 4, 8:00-11:00.

The garden will not need watering but will be in need of weeding and erosion repair.

Those who worked at the Nov. 6 party were Doc Vaughn, Mrs. Ruth Cuzner, Miss Helen Howe, Mr. & Mrs. Reinboldt, Mr. & Mrs. Scott, Mrs. Park, Mr. Waite, and Mr. & Mrs. Nelson.

MODERN SHIP TO BAJA

The new ferry-passenger ship which sails between Mazatlan and La Paz., B.C.S. cuts the passage time and makes the trip much safer and more comfortable.

The 4200 ton ship makes 17.5 knots per hour. The ship has a maximum capacity of 114 cars and trucks.

Three different types of passenger accommodations are offered, Tourist, Salon, and Cabin.

Cabin class costs \$28 (350 pesos) and offers 23 two-passenger cabins with access to bar, smoking room and dining room. Each cabin has private bathroom with shower.

Tourist class accommodations cost \$16.00. Tourist class rooms accommodate four passengers (20 rooms) and two passengers (10 rooms). Public bathrooms restricted to tourist deck passengers must be shared by this group.

Salon class costs \$4.00. Salon passengers sit in a common room with bus-type seats. They eat in a cafeteria which serves also as a motion picture theater. There are 220 salon seats.

Cabin and tourist class passengers may eat in the cafeteria or the dining room. The cafeteria fare is cheaper.

Fortunately, rules require that smoking take place in the smoking rooms. This keeps the air from becoming too smogged, and also is a reassuring safety regulation.

Cabin class passengers may also use the ship swimming pool.

Cost of ferrying vehicles varies according to type and weight. The smallest cars cost \$30 (375 p.) and the largest up to \$128 (1700p.).

The ship sails from Mazatlan at 5 p.m. on Saturday and arrives in La Paz at 9 a.m. Sunday; sails from La Paz at 5 p.m. Sunday and arrives in Mazatlan Monday at 9 a.m.

Other times are:

From: Mazatlan Tues at 5 p.m.

To: La Paz Wed. at 9 a.m.

From: La Paz Thurs. at 5 p.m.

In: Mazatlan Fri. at 9 a.m.

The ship La Paz has been in operation since November, 1964. Japanese ship builders constructed the 360-foot-long, 52-foot wide, five-deck vessel. The ship is air conditioned and has latest safety features.

It makes the 240 nautical miles between Mazatlan and La Paz in 16 hours.

If you want to travel in luxury there is a Special Class costing \$50 (625 p.) per person, with food and drinks extra. Two extra-plush suites are offered on bridge level. These suites offer thick carpets, large beds and closets, private living room, private bathroom, special dining room, and a private deck.

SUCCULENTS FOR HANGING BASKETS

Crassula marginalis minuta

Crassula perforata

Crassula perfossa

Crassula corymbulosa

Kalanchoe uniflora

Sedum morganianum

Sedum adolphii

Crassula reversitosa

Chlorophytum comosum

Columnnea allenii

Kalanchoe beauverdii

Portulacaria afra

Oscularia deltoides

Delosperma echinatum

Cissus quadrangularis

Ceropegia woodii

Hoya bella

STICKY BUSINESS

(Item contributed by Mrs. Lewis)

Junction City, Kan. Aug. 14 (AP)

Richard Waters, local attorney, is about to run out of ceiling room for his fast-growing 10-year-old cactus plant. During the summers he keeps it in his garden and it has spent winters in a greenhouse here, but at 13 feet it has finally outgrown that winter home. So he has put it in storage at the Geary county courthouse, the only place in town with a ceiling high enough for the plant.

CACTUS JELLY

By Mrs. William Nelson

The first thing is to get the fruit ready. Burning off the glochids is best done over the flame of your gas range. Be sure to do a really good job, both to protect your fingers, and because it makes the "apples" much easier to peel. For peeling, both tongs and gloves are a must. The disposable plastic gloves called "handgards" are fine. You will end up with very few glochids, that way.

After peeling, chop fine, or grind fruit. You will need two lbs. at this point, so start with two and one half or more pounds before peeling. Put chopped or ground fruit in a large kettle, and add half as much water as you have fruit.

Simmer for twenty minutes, stirring frequently. If it appears to be getting too dry, add a little more water, but be careful not to put in too much, or the juice will be too weak.

When the fruit pulp appears to be cooked, remove from the heat. Some types of cacti will take more than the 20 minutes to cook. So use your judgment. Strain the juice as in making any jelly, but do not use your good jelly bag. Hunt up an old piece of muslin you are willing to throw away. Strain either twice, or through two thicknesses of muslin. It will take quite awhile.

Now, with good luck, you are going to have $3\frac{1}{2}$ cups of juice. You can add $\frac{1}{4}$ to $\frac{1}{2}$ cup of lemon juice if the cactus juice tastes very flat (and it probably will). You may want, also, to add some food coloring, if you have used the cacti that do not get very red.

Put your $3\frac{1}{2}$ cups of juice in a large kettle, add one package of commercial pectin (This recipe is planned for Sure-Jell). Have ready 5 cups of sugar. Over high heat, bring the juice and SureJell to a boil. At once, add the sugar. Bring up to a full, rolling boil, stirring constantly. When the mixture comes to a full boil which can not be stirred down, boil one minute, remove from heat, skim and pour into sterilized jars. You will end up with about three pints of jelly.

It would be better to start with plenty of fruit, for it is better to have some juice left over than to have to add water to make the needed amount. And of course, use quite ripe fruit. This jelly may take two weeks or more to "set" good, so don't get impatient.

Portulacaceraea

This is a common succulent weed found in almost all areas of coastal Southern California.

