

The Central Spine

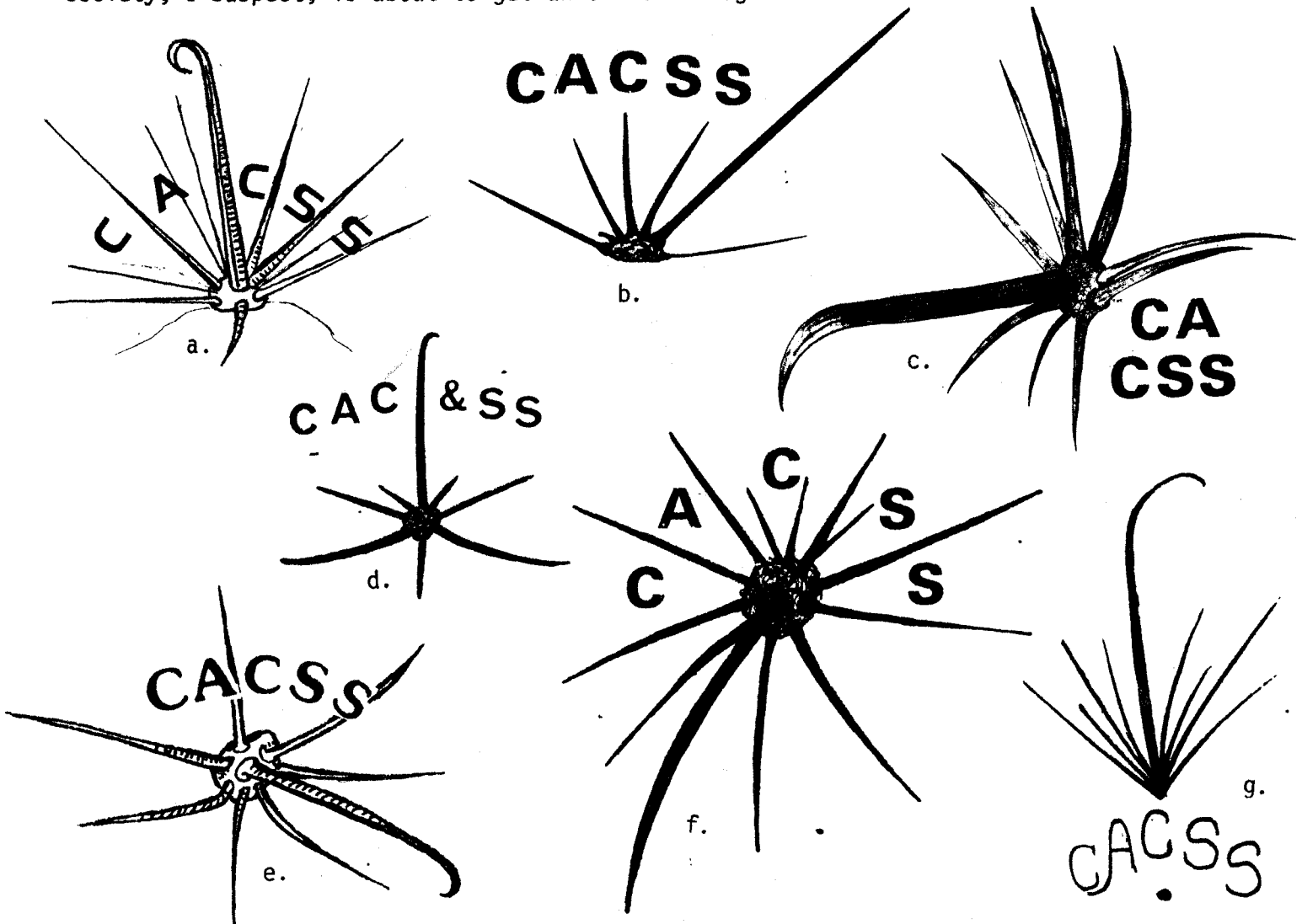
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CENTRAL ARIZONA CACTUS AND SUCCULENT SOCIETY

January 7, 1979

SOCIETY LOGO by CHARLES F. MERBS

The Central Arizona Cactus and Succulent Society needed a logo and a name for its newsletter, so a call went out to the members of the society to give the problem some thoughtful consideration. Ideas flowed in, but a name for the newsletter proved easier to resolve than the logo. W. Hubert Earle suggested the name "The Central Spine" and it quickly met with the approval of the Board and the Membership. It was generally agreed that the logo should in some way reflect the name of the newsletter, so the search for a logo narrowed down to spine clusters featuring prominent central spines. The spine clusters featured on this page are the result of that search, and one of them, hopefully, will become the new logo of the Society. The important decisions now facing us are (1) which spine cluster will be used for the logo, (2) should the logo include the initials of the Society, (3) if the initials are included, where should they appear relative to the spine cluster, and (4) what type of lettering would be most appropriate? The advice of professional artists would certainly be valuable in making some of these decisions. In any event, here are the logo possibilities submitted by the membership. All are quite accurate representations of actual spine clusters (not stylized or imaginary). Some, in fact, are readily identifiable as to the cactus represented. Any would serve well as the Society's logo, and we are grateful to those members who took the time and effort to submit their ideas. The Central Arizona Cactus and Succulent Society, I suspect, is about to get an official logo.



THE COCHEMIEA OF CEDROS ISLAND by KENT C. NEWLAND

On March 18th, 1976, I had the fortune to visit beautiful Cedros Island in conjunction with a cruise sponsored by Mesa Community College. I have many fine memories of the trip (those times when I was not seasick) visiting the localities of the plants I was first introduced to in the literature.

Cedros Island, off the Pacific coast of Baja California, is approximately 300 miles south of San Diego. About 134 square miles in area and rising to 3,950 feet above sea level, Cedros is an ideal haven for cacti and succulents. One of the strangest and most beautiful of these cacti is Cochemia pondii (Greene) Walton.

The genus Cochemia, in the subtribe Coryphanthae, is named in honor of the aboriginal Cochemi Indians who once inhabited Lower California. Cochemia Walton is characterized by elongated stems densely covered with stright or hooked spines with spirally arranged tubercles, tubular zygomorphic flowers, and globular purplish-red fruit. Some botanists have reduced Cochemia to subgeneric level under the genus Mammillaria. Cochemia pondii is joined by three other species, C. halei, C. poselgeri, and C. setispina, all endemic to the peninsula of Baja California and its Pacific islands.

Having checked out Cochemia pondii in the literature before leaving, I noted that Cedros Island was the type locality (where the plant was first described). Going ashore on rocky and shrubby Cedros early Thursday morning, March 18th, I first observed some Ferocactus chrysacanthus and mounds of Echinocereus martinus. The search for C. pondii had begun. Later, I walked over to some cliffs overlooking the sea. A speck of red, like the breast of a hummingbird against the gray rock of the cliff, hit my eye. My heart skipped a beat and I was overcome by euphoria as I realized it was C. pondii, in flower! The deep red zygomorphic flowers glowed in the morning sun. The foot-long, hook-spined stem trailed over the cliff like some serpent. The captivating red flowers, reminding me of Borzicactus or Matucana, left me dazed. Walking farther up some of the side canyons on the island, I observed more cochemieas in flower, some holding on for dear life on the steep cliffs, some under the brush and elephant trees, some delighting in the full sun. The blooms appear on stems a foot or more in length, or on small side stems attached to the main long stems. Cochemia pondii is named in honor of Charles Fremont Pond, U.S.N., who botanized Cedros Island and other islands of the coast of Baja in 1889.

I collected the purplish-red fruit of C. pondii and found them loaded with ripe brown seed. The seed germinated readily and in a year's time the seedlings measure over a quarter inch in diameter. I collected seed of this species for the International Succulent Institute in Orinda, California, for the eventual distribution of the species to collectors. Cochemia pondii is fairly common on Cedros Island and is reported from other islands along the coast of Baja California. Hopefully, it will stay that way.

EARLY HISTORY OF THE DESERT BOTANICAL GARDEN by W. HUBERT EARLE

Many botanical gardens around the world owe their inception to public minded individuals with the vision to see the importance of presenting regional plants and exotics to be viewed and admired by the local populace, and possibly to be grown on their own premises. Such a visionary was Gustaf H. Stark who began in 1910 as an engineer on the Salt River Water Project.

In the early part of this century, he purchased acreage at the corner of Indian School and Scottsdale Road, extending to the Arizona Canal. There he grew many citrus trees and made grafts that caused considerable comment. He had additional acreage in crops and was the first man to successfully grow a grass lawn in the area. Many people from Phoenix would drive across the desert in their horse-and-buggies or Model "T"s to see and walk on this lawn which has now been replaced by a Basha's Food Market and other businesses.

Mr. Stark enjoyed plants and would prowl over the desert, collecting the plants and their flowers, drying and pressing them, putting them onto herbarium sheets, and shipping them to the Smithsonian Institution in Washington, D.C., for identification.

Many people finding strange plants on their desert land would take them to Mr. Stark, the "Swedish Botanist", for identification. So many people came to visit him that he

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began to conduct classes about plants and their culture. Eventually, the members of the classes formed a plant society. Despite the fact that it had no elected officers, this society represented the embryonic start of the Desert Botanical Garden of Arizona.

Next to enter the picture were Mr. and Mrs. Ed Walker. Mr. Walker was the local agent for the Glenn Falls Insurance Co. beginning in 1924. He purchased a home and some land on W. Southern Ave., but was later transferred to Denver. When the Walkers retired in 1934, they returned to their old home in Phoenix. One afternoon, while driving north on Scottsdale Road, they saw a sign which read "SAVE THE DESERT" and followed its arrow up the driveway to the home of Gustav Stark. They were to spend many evenings in the Stark classes, listening to his warnings that the desert was disappearing, and to his advice that "a piece of desert land should be set aside so that future generations would be able to view the desert as it was seen by the early pioneers." The Walkers supported Mr. Stark's idea, but neither they nor any other members of the class had the finances to pursue the vision.

Then comes Mrs. Gertrude Divine Webster, a New Englander who arrived in Arizona in 1928. She bought some land in the Arcadia District and built a lovely home. This was a frost free area between Camelback Mountain and the Arizona Canal extending from Scottsdale Road to 44th Street. As it was above the canal, the district drilled its own wells to supply water to its homes and to irrigate its citrus groves. Mrs. Webster's lovely home was located on the south side of Camelback Mountain and she surrounded it with flowers, unusual trees, and cacti. Her cacti were shipped to her from west coast growers of cacti and other succulents. She enjoyed working among her plants in the winter, but left them to her horticulturist in the summer while she returned to Vermont.

Mrs. Webster was an ardent traveller and on one of her trips to Europe she purchased a box of cacti. The plants had probably been grown from seed in a German nursery, and she wanted to add them to her Arcadia garden. The box of plants was taken from her by U.S. Customs agents in New York with no assurance that she would ever see them again. This greatly upset her and she soon had the phones ringing in Washington, D.C., and, after several months, Senator Carl Hayden persuaded the Department of Plant Inspection to release the plants to her.

On returning to Arcadia, she told her story to some friends who urged her to visit the "Desert Club" at Mr. Stark's home. She did and became quite interested in his mission to obtain a parcel of land to establish a botanical garden in the Phoenix area.

It did not take long for Mrs. Webster to get things moving. The club incorporated in 1935 under the name "The Arizona Cactus and Native Flora Society, Inc.", the name it still retains. Mrs. Webster was the President, Mr. Walker the Treasurer, and Mrs. Walker the Secretary. They began to look for a suitable site and, after much discussion with the other members, they settled on a tract in Papago Park (the old Papago Saguaro National Park). A group of the members then contacted the State Legislature which owned the land under the direction of the Arizona Land Department. Mrs. Webster used her influence and social connections in 1935 to have the legislature pass H.B. 119 giving the Arizona Cactus and Native Flora Society the use of 300 acres in Papago Park, part of which is presently occupied by the Desert Botanical Garden.

Architects were hired and plans were drawn up for the Administration Building which would have an auditorium, an office, and two apartments. A drive was made for building funds, but the response was so slow that Mrs. Webster, an experienced philanthropist interested in schools, hospitals, etc., decided to finance the building herself at a cost of \$17,777. This was during the Depression and money went a long way.

Construction began in 1937. The walls of the building were formed of large adobe blocks made from the desert soil on the property. They were laid-up, covered with poultry wire, then coated with rustic desert mortar. Plumbing and electric wiring were installed. Long pine logs cut near Prescott were to be used for the roof, but they proved to be too warped and had to be replaced. The new timbers had to be properly seasoned so the auditorium remained open to the skies while the rest of the building was completed. When the auditorium was finished, Oscar Strobel, an eminent artist and

his students painted Indian designs on the walls. These designs have been admird over the years by the many visitors to the auditorium.

Having never seen the original plans, I do not know why the auditorium roof was install 2 to 3 inches below the level of the roof drains. Perhaps the plans show that the roof was intended to hold 2 to 3 inches of water for cooling purposes. Eventually, however, the water caused the roof beams to sag. Twelve years later the roof was leveled and the drain lowered to allow rain water to escape down the drains instead of leaking through the electric fixtures into the hall below.

The Garden's first director was Mr. George Lindsay (now Dr. Lindsay, Director of the California Academy of Sciences, San Francisco) in 1938. He proved to be far-sighted in laying out the beds and acquiring plants. Plants were given by Mrs. Webster, Neff Bakker, Sherman Beahm, Herb and Angela Bool, the Boyce Thompson Arboretum, Ina Campbell, Whitman Evans, Howard Gates, Mrs. R. S. Harvey, R. S. Hoad, the Huntington Botanical Garden, Dr. George Lindsay, Dr. Robert Poindexter, Homer Rush, Mrs. H. Starkweather, and Gil Tegelberg among many others.

The Garden had a National Youth Administration project and from it George Lindsay was able to use young men to dig and plant cacti from various gardens. Several trips were made to the Cornelius Mine at Ajo to bring back truckloads of organ pipe cacti that would have been covered up by the removal of overburden at the mine. A trip was also made to Baja California to bring back a truckload of large cerei.

George Lindsay had shown great foresight, tremendous energy, and considerable vision in getting the Garden established, and the Board was saddened by his departure in 1941 to serve in the Navy in World War II. Mr. Charles Fleming of the Boyce Thompson Institute conducted classes and field trips, but the Garden had to close down due to a lack of visitors who could get the gasoline for travel.

The Garden was maintained on a part-time basis by Mr. and Mrs. Charles Svob of the Grounds Department of Arizona Teachers College. This couple, for lack of a sufficient caretakers salary, sold many of the Garden's plants to supplement their income. They also kept about 20 hutches of rabbits and tethered a cow west of the present "paint building." Mr. and Mrs. Ed Walker visited the Garden weekly to be sure that the plants were being watered and to have any necessary building repairs taken care of.

Hazards arose during this time, one being the establishment of a Prisoner of War Camp nearby (the prisoners of the Graf Spee were interred here). A cavalry unit was sent in to protect the camp and the cavalymen and their gun units would sweep down through the Garden destroying plants as they went. Funds were somehow found to construct a barbed wire fence to keep the militia from overrunning the plants.

In December of 1946, Mr. W. Taylor Marshall was hired by Mrs. Webster to direct the Garden. He was from Highland Park, California, had written several books, and was President and Fellow of the C.S.S.A. He supplied articles on cacti for many local and foreign magazines. He came to rebuild the Garden, and to increase its membership which had dropped from 90 members before the war to 19 faithful members while the Garden was closed during the war.

It was said by many folks that Mrs. Webster was quite a character. This is evident by a requirement she placed on Mr. Marshall during his first year as Director, to increase the membership to 200 members by the end of 1947. This aroused the C.S.S.A. which went into action, sending \$200 for 100 members. As it turned out, he had acquired a total of 265 members by the end of the year. Unfortunately, Mrs. Webster died on March 30, 1947, before she could see her requirement fulfilled.

Mrs. Webster left her Arizona holdings to the Garden, but it took many years to probate the will. There were many lean months when "beans" were quite tasty before the estate was completed in 1952. How well we got along while continuing our programs and building program is a credit to Mr. Marshall.

A ray of sunshine fell upon the Garden in 1949 when a winter visitor from San Francisco heard of our plight and sent us a check for \$2000. The Valley National Bank, executors of the Webster estate, also advanced the Garden money as needed until 1952. Mrs. Webster's

holdings were sold and the cash credited to the Garden's account. A total of \$220,000 was placed in interest-bearing stocks, these bringing in \$18,000 to \$22,000 a year to help pay for the Garden's operating expenses. An interesting proviso in Mrs. Webster's will stated that if the membership of the Garden ever dropped below 200 members, the estate would immediately revert to the Children's Hospital in Columbus, Ohio. Over the years the membership of the Garden has climbed to 1,600 members, so there is no danger of the money being lost.

Mr. Marshall began the publication of the SAGUAROLAND BULLETIN in June of 1947, and it is still the official organ of the Garden. He wrote "Arizona's Cactuses" (Dec. 1950) and "Introduction to Desert Plants" (1952), and held the First Annual Cactus Show in February, 1948. The Thirty-first Annual Cactus Show has just been held, a fine tribute to Mr. Marshall's foresight. He was instrumental in building the Rest Room Building east of the Administration Building, he pioneered the construction of the aluminum lath house for the growth and display of plants that needed protection from the sun and cold, and he erected the Archer House for the superintendent of the garden, extended the paths, enlarged the Garden, and added many new plants. He also took the Executive Board on field trips. He conducted classes in "A Better Understanding of Desert Plants", gave slide presentations on Sunday afternoons, and made many field trips through the state. His contributions to the Garden and to the world of cacti in general were numerous, and we all regretted his death on August 7th, 1956.

In 1946 Senator Barry Goldwater offered to submit a Memorial to the Senate requesting that the land on which the Desert Botanical Garden was located be sold to the Garden for \$2.00. The Board refused the offer feeling that it was better to have the area maintained by the State of Arizona. The Garden presently leases its land from the City of Phoenix.

The winter visitor who gave the Garden \$2000 in 1949 owned a considerable block of land on north 64th Street between McDowell and Thomas roads, and extending to the Cross-cut Canal, which he offered to the Garden in 1951 to be used as an extension of the present Garden. The Board felt that it had a large enough garden to maintain with the limited staff available. The land was later subdivided and is presently covered with homes.

Not all of the decisions made in the past may have been wise ones, but most of them clearly were and the Garden has grown and prospered.

C.A.C.S.S. PROFILES - HENRY C. TREISLER, JR [C. F. MERBS].

Henry Triesler, best known to the membership of the Central Arizona Cactus and Succulent Society as one of the society's founders and its president for three and half years, has infused the society with enormous enthusiasm since its very beginning. Henry was born in Hagerstown, Maryland, in 1918. He grew up in Hagerstown, then attended Western Maryland College where he majored in liberal arts in preparation for a career in journalism. World War II intervened, however, and Henry put his R.O.T.C. commission to work in the U.S. Army. He fought in North Africa and up the peninsula of Italy to the Brenner Pass. After the war, Henry stayed in the army. He attended the Command and General Staff College and did graduate work at Georgetown University. He spent time in Greece and Korea, finally ending up in the Far East Command Headquarters in Japan. In 1958, Henry retired from the Army and decided to make the desert his home. He moved to the Phoenix area, to an apartment with a big swimming pool, and started his machining company. In 1962, he bought his present home, the site of several significant C.A.C.S.S. meetings over the last five years.

Henry's interest in succulents dates back to the time he received several cacti, mostly opuntias, from a neighbor. Later, John Hales gave him more plants and introduced him to Cactomaniacs. In 1973, Henry and several other cactus enthusiasts (see the last issue of the Central Spine) met at Henry's home to form the Central Arizona Cactus and Succulent Society and Henry became its first President. Henry's interest in cacti and other succulents concerns mainly their form and beauty, and his favorite plants are euphorbias. Most recently he has become interested in exotic forms of cacti as well.

1979 Officers and Board of Directors

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New Editor of the Central Spine

This long-overdue issue of the Central Spine is my last as Editor. Being Editor for the Central Arizona Cactus and Succulent Society has been a very pleasant task, thanks largely to the excellent cooperation I received from the membership of the Society. Special thanks are due to Genevieve Oppen who assisted me in many ways, especially in the securing of articles. If an article you have submitted to the newsletter has not appeared to date, do not give up hope. All of the material that I received has been turned over to our new editor, Sylvia Forbes, and I am sure that she will wish to use many of these items in future issues. I hope that you will give Sylvia the same excellent support that you have given me during my editorship. I have every expectation that Sylvia will be a fine editor. (C. Merbs)

Early Evidence for the Use of Peyote by Indians of Coahuila

[The following information was taken from an article by J. G. Bruhn, J.-E. Lindgren, B. Holmstedt and J. M. Adovasio entitled "Peyote Alkaloids: Identification in a Pre-historic Specimen of *Lophophora* from Coahuila, Mexico," which appeared in the March 31, 1978, issue of *SCIENCE* (pp. 1437-8).]

In 1941, the archaeologist W. W. Taylor conducted a brief but thorough excavation of a small site, designated as CM-79, in west central Coahuila, Mexico. The site, a cave which contained multiple burials, produced a variety of artifacts identified with the so-called Mayran mortuary complex which is centered in the Laguna District of southwest Coahuila. On the basis of radio-carbon dating, the burials and associated artifacts recovered from the cave date to approximately 900 years ago. Among the materials recovered was a string of dried cacti resembling peyote buttons. One of these "buttons" was removed from the "necklace" and subjected to alkaloid analysis. Five alkaloids, all present in modern peyote buttons, were found to be present in this ancient material, mescaline, anhalonine, lophophorine, pellotine, and anhalonidine. The study demonstrated both the remarkable stability of the alkaloids in this hallucinogenic cactus, and the fact that peyote was being used for ritual purposes by the natives of Coahuila at least a thousand years ago. (C. Merbs)

Lew Bremer Describes New Species of *Coryphantha*

The May-June 1978 issue of the *CACTUS AND SUCCULENT JOURNAL* contained an article by L. Bremer entitled "*Coryphantha grandis*, sp. nov.: A new species from Durango, Mexico." Lew Bremer is well-known for his research on the genus *Coryphantha*. In this article, Lew describes how he was shown several coryphanthas by a friend in Mexico who does a great deal of exploring in the cactus country, "often reaching remote areas that have seldom been seen by any botanist." Most were easy to identify, but one, thought to be *C. longicornis* by its finder, had several characteristics that did not seem to fit. On their way back from Mexico, the Bremers found several plants of the same species growing in the greenhouse of a friend in Texas. These plants were also identified as *C. longicornis*. The unusually large size of the plants, their spiral count, and their flowers convinced Lew that he was dealing with a new species that he named *Coryphantha grandis*. The remainder of the article is a scientific description, in Latin and in English, of the new species. (C. Merbs)