Cactus Quarter

Newsletter of the Palomar Cactus and Succulent Society

The North San Diego County Cactus and Succulent Club

Volume 69, Number 6 July 2023

What's Inside

anatomy of a Paniculate Agave [p.c. - Colectivo Sonora Silvestre]

People, Agaves and Bats, Oh My!

Come hear Steve Platt talk about efforts to save bats by planting agaves along their migration route. Details on page 2.

Meeting, Fourth Saturday, July 22

11:00 am—3:00 pm

Community Center, 210 E. Park Ave.

Escondido, CA

- Brag Plant Table: Plants must be labeled and on the table no later than 11:45 am to be judged.
- Benefit drawing and exchange tables, and auction will all be held.
- Library will be available. Please return books from prior months' checkout.
- **From Barbara, our librarian: Reference books are available to be read at meetings—no checkout. All books checked out in July will be due in September due to no meeting in August.**
- Plant of the month: **Euphorbia millii**

August 2023 Potluck Picnic

Saturday, August 26, 2023

11:30 am—2:30 pm

At the

Palomar College Cactus & Succulent Garden

Palomar College, Comet Cir, San Marcos 92056

No Brag, Exchange, Sales Tables or Library

More info will be in August newsletter.

Plants of the Month 2023

July	Euphorbia millii
August	Picnic
September	Tylecodon
October	Mini Aloes
November	Schlumbergera

Supporting the Mutual Affair of Agaves and Bats

Steve Plath, Presenter July meeting

Bat Conservation International (BCI) recently began an initiative to enhance habitat for the lesser long-nosed bat in southeastern Arizona and southwestern New Mexico. This bat, along with two other North American species, are primarily nectar feeders, relying on cactus and agave flowers to supply their energy needs during their annual migration between the US and Mexico. In 2019 BCI contacted the Gila Native Plant Nursery to grow thousands of native agaves (*Agave palmeri* and *A. parryi*) for planting at strategic locations along the migratory paths of these bats. This presentation will illustrate the unique blend of combining horticulture and plant production with a targeted focus for conservation of an animal species.

Steve is a native of Southern California and has been an enthusiastic cactus and succulent hobbyist for over 50 years. He joined the Cactus & Succulent Society of America in 1975 and served as vice president of the CSSA as well as has been a board member and president of numerous affiliate clubs in Arizona, California and Nevada.

Steve began growing native plants for habitat restoration and implementing field revegetation in 1994 at Castle Mountain Mine in the East Mojave Desert of California. He has worked for an assortment of environmental companies such as Bitterroot Restoration, Native Resources International and RECON Environmental, Inc. and has managed restoration projects in California, Arizona, Nevada, New Mexico and Texas. Steve recently retired from the Gila Watershed Partnership where he managed the Gila Native Plant Nursery in Safford, Arizona for five years. He and his wife Julie currently reside in Safford, Arizona.

https://www.batcon.org/our-work/protect-restore-landscapes/agave-restoration/

Scan this code for a digital copy of “Growing Agaves for Bats.” or visit this site:

https://www.borderlandsplants.org/resources

Plant of the Month - Euphorbia millii

Lorie Johansen

The common name "Crown of Thorns" refers to the belief that the crown Jesus Christ was forced to wear at his crucifixion was made from stems of this plant, although, various resources indicate that there were other flexible spiny plants that could have been used to weave a circular crown. The species is named after the governor of the island Reunion, Baron Milius, who introduced E. milii in 1821. This evergreen, everblooming, low-maintenance succulent received the Award of Garden Merit from the Royal Horticultural Society in 1993.

Native to Madagascar, it grows as a shrubby plant on a woody stem up to 3 feet tall. The variety splendens grows larger, 5-6', and the hybrids are of various sizes. The greyish brown, branched stems, adapted for water storage, are 5-7 sided. The stem and branches are covered with prominent, 1″ sharp grey spines, although there are some clones that are nearly thornless. The new growth is sparsely covered with narrow succulent leaves which naturally drop as the stems mature, producing a scraggly appearance on older plants. The plant may completely defoliate when stressed (drought or high temperatures) but will later leaf out in new growth.

A specialized structure called a cyathium (fused bracts that form a cup) has a single female flower with three styles surrounded by five groups of male flowers, each with a single anther, and five nectar glands. Two of those five nectar glands have petal-like appendages.

The buds, open inflorescences, inflorescence closeup and closeup of cyathium

The species' flowers are bright red, or yellow in E. milii var. tananarivae, but hybrids offer a variety of flower colors from white, cream and yellow, through many shades of pink and red. Some hybrids come in double forms. The flowers are generally produced in clusters.

Several species and cultivars were introduced into cultivation in the 1970s that were used in breeding to produce a wide range of plant forms and flower colors. Hybrids of E. milii and E. lophogona (which has long, leathery leaves) produced free-flowering plants with large, thick, deep green leaves. The California hybrids, developed for their stout stems and larger colorful flower bracts, are often referred to as "giant crown-of-thorns" series. German growers made selections of natural crosses in the wild like the California hybrids but with thicker leaves and thinner stems with flowers ranging in color from cream to various shades of pink and red, are often formed within other flowers. Many of these hybrids are patented and many are marketed in very small pots, as they are tolerant of both drought and over-watering and bloom well in tiny containers.

In the early 1990's new, large-flowered hybrids were produced in Thailand. The economic boom and demand for more exotic types of E. milii fueled the development of hundreds of cultivars, with a huge range of flower colors and plant sizes. Instead of just bright red or yellow, there were also many pastel shades, often with blends of different colors. With cymes with more flowers, some looked more like hydrangeas than the typical crown of thorns. The form of these plants tends to be more upright and compact than the typical straggly-stemmed species and the leaves are much larger and a brighter green. When the Southeast Asian economy crashed in the late 90's, most of these cultivars were lost. Now there are only a few major growers near Bangkok that export these plants. The Thai hybrids are popular as collector plants but have not been successfully introduced in Europe or the US as mainstream flowering houseplants.

Cultural requirements:
These are summer growers (USDA Zones 9-11) where plants are best grown in dry to medium moisture, well-drained soils in full sun. In hot summer climates, midday shade is appreciated. They are tolerant of poor soils and dry soils, but regular applications of moderate moisture may result in better bloom with less leaf drop. Wet soils, particularly in winter during resting/dormant period, can be fatal. Best located in areas with good air circulation. Sometimes poor flowering is due to too much light at night – they need darkness to promote flowering. Fertilize lightly in spring and summer with a balanced fertilizer. Over fertilization will produce soft and vigorous vegetative growth and limited flowers. E. milli is sensitive to boron, so be cautious about using fertilizers with high levels of micronutrients. They are frost-sensitive, so protect if necessary.

Blistered rash caused by contact with Euphorbia sap.

Propagate from tip cuttings AND wear gloves when working with this plant. Sticky white latex sap is poisonous (avoid contact with skin, mouth, or eyes). Some people experience skin rashes as a result of contact with white sap, including me.

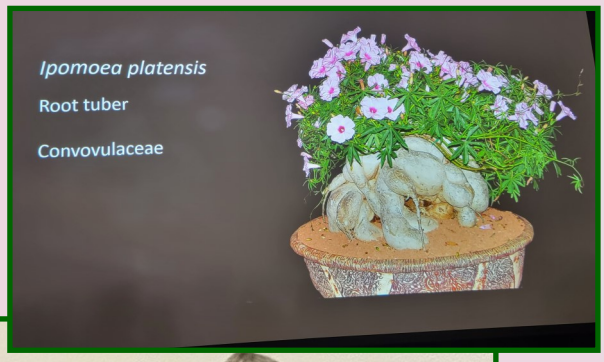
Resources:

https://worldofsucculents.com/euphorbia-milii-crown-of-thorns/https://hort.extension.wisc.edu/articles/crown-of-thorns-euphorbia-milii/ https://www.missouribotanicalgarden.org/PlantFinder/PlantFinderDetails.aspx?kempercode=b633 https://www.plantsrescue.com/posts/euphorbia-milii

These photos are courtesy of Wanda and Gary

June Meeting Recap

At the June meeting Philippe de Vosjole spoke and presented a slide show about Caudiciforms and Pachyforms. Philippe showed amazing photos of pachyforms that look like living sculptures, a very interesting and enjoyable presentation



Phillipe and Mike judged brag plants

June Auction Plants

June Brag Plants

Novice Cactus, 1st:
Susan Turner
Espostoa melanestele

Intermediate Cactus, 1st
Patty Nelson
Pygmaeocereus bieblii

Intermediate Cactus, 2nd
Kevin Smith
Parodia rubellihamata

Advanced Cactus, 1st
Russel Ray
Echinocereus dasyacanthus

Advanced Cactus, 2nd
Moni Waiblinger
Mammilllaria sp

Advanced Cactus, 3rd
Moni Waiblinger
Echinocereus rigidissimus

Novice Succulent, 1st

Barbara Raab

Fockea edulis

Novice Succulent, 2nd

Marlene Walder

Aloe hybd.

Novice Succulent, 3rd

Marlene Walder

Aloe hybd, variegate

Intermediate Succulent, 1st

David Buffington

Dioscorea elephantipes

Intermediate Succulent, 2nd

Kevin Smith

Echeveria sp.

Intermediate Succulent, 2nd

David Buffington

Calabanus hookeri

Intermediate Succulent 3rd

Patty Nelson

Aloe hybd .

Advanced Succulent, 1st

Russel Ray

Crassula spiralis

'Black Curl'

Advanced Succulent, 2nd

Mike Nelson

Monadenium ritchiei variegata

Advanced Succulent, 2nd

Russel Ray

Euphorbia horrida

Novice Dish Garden, 1st

Kristie DeTar

Haworthiopsis reinwardtii

Novice Dish Garden, 2nd

Kristie DeTar

Gasteria pillansii

Advanced Dish Garden, 1st

Moni Waiblinger

Haworthia sp., Faucaria tigrina, Crassula sp., Portulacaria afra

Intermediate Dish Garden, 1st

Pauline Wong

Misc.

Intermediate Plant of the Month, 1st

Kevin Smith

Echinopsis oxygona

Intermediate Plant of the Month, 2nd

David Buffington

Echinopsis eyriesii

Advanced Plant of the Month, 1st

Russel Ray

Echinopsis oxygona

Advanced Plant of the Month, 2nd

Lorie Johansen

Echinopsis lageniformis f. monstrose

An aside from Lorie:

German name “Frauen gluck,”

meaning “women’s joy.”

President's Corner

Robert Kopfstein

Early this June we made a trip to Lotusland in Montecito, just south of Santa Barbara, a 37-acre wonderland of plants, pools, fountains and sculptures. It was the home of Madame Ganna Walska, a would-be opera singer who lived there for nearly 45 years.

During that time, she created a botanical canvas of colors, shapes, and textures that could rival the paintings of some of history's greatest artists.

The garden itself dates back to the 1880's when it was a commercial nursery called Tanglewood owned by a man called Kinton Stevens. Some of the specimens still growing in the garden date to this era. By the 1920's the property was sold to the Gavit family who built a Spanish style villa and changed the name to Cuesta Linda. In 1941 Ganna Walska bought the house and land and eventually changed the name to Lotusland in honor of the lotus flowers that grew in a pond below the house.

The Villa

Any garden, be it large or small, usually reflects the influences of the people who plant and tend it; Lotusland is no exception. The main objective of our trip was to see the collection of South American columnar cactus which was installed about twenty years ago. The three-quarter acre planting boasts over 500 plants, 300 species. The three principal persons who made this garden possible were Madame Ganna Walska herself, Merritt Sigsby Dunlap, the donor and Eric Nagal-mann, the landscape architect who—pro bono—designed the planting.

Ganna Walska was born Hanna Pusz June 26, 1887 in Brest, Belarus. She aspired to be an operatic singer and changed her name to Ganna, the Russian form, for Hanna, and Walska because she was fond of music, especially waltzes. An outstanding beauty, she attended a ball and won the prize of having her full-length portrait painted, courtesy of Czar Nicolas II. The portrait still exists as does the autobiography she wrote in 1943, *Room at the Top.* What is unfortunately lost is the 1916 film *Child of Destiny* directed by William Nigh in which she played Constance. At 19 she married for the first time to a Russian nobleman, and over the years she married five more times, once to the heir of the McCormick (of reaper fame) fortune and once to Alexander Cochrane "the richest bachelor in the world." Her last husband, Theos Bornal, 20 years her junior, was a follower of Tibetan Buddhism and he talked her into buying Cuesta Linda, renaming it Tibetland. It was to be a center for study and meditation, but after their divorce, Ganna Walska renamed the place Lotusland. Of her six husbands, four were very wealthy and Ganna Walska used the proceeds of her marriages to create what is today one of the premier public gardens on the West Coast.

Merritt Sigsley Dunlap was born in 1906 in Quincy, Illinois and became a building contractor whose company was based in Glendale, California. A World War II veteran, he ultimately settled in Fallbrook where he became a 25-year member of the Fallbrook Garden Club, starting in 1978. Since 1929 he had been collecting cactus, eventually focusing on South American species. Forty percent of his collection was grown from seed because at that time specimen plants were not available from nurseries.

“Sigs” became friends with Ganna Walska in the 1940’s, and in 1966 he promised to give his cactus collection to Lotusland. The actual transfer of the 530 plants began in 1999 (Madame G. had died in 1984) and it took six months. The specimens were carefully dug, boxed, and their north-south orientation was marked. They then were transported north on flatbed semi-tractor trailers. In 2003, the plants were in the ground.

The layout of the new cactus garden was done by Eric Naglemann who donated his time and talents to the project. Naglemann, a Santa Barbara local, had met Ganna Walska in the 1970’s. In his career, which started when he was eleven years old with his first job for $1.50 per hour at a local nursery, has involved 60 years of plant study. He has worked in Asia and Europe, and also designed the palmatum and restored the insectary of Lotusland. He called his work on the Dunlap garden “Salvador Dali goes to the desert.”

Robert among giant columnar cacti

A big element of Nagelmann’s design of the Dunlap garden is the raised portion that allows the visitor to get an overview of the planting. The first time I saw it in 2003, the careful planning and placement of the specimens was evident, and because many of the cacti are columnar, it is necessary to get above the plantings to be able to see a wider view of the plants. Twenty years later it is even more important to be above in order to appreciate the collection. As you walk the paths, the cacti are now so large that you feel as if you are in a dense forest, totally surrounded by towering cacti, some of which are 20 feet tall.

When the specimens were ready to go into the ground, Lotusland imported 300 tons of diarite, a black shale from Washington state, to act as a top dressing. The black mulch is designed to trap heat; Santa Barbara is often much cooler than San Diego, and Montecito is miles closer to the coast than Fallbrook. In addition to the shale mulch Lotusland placed an additional 300 tons of boulders to act as accents and give the flat areas texture. These large rocks also are used to make the raised viewing area look more natural.

Opuntia galapageia

Some of the specimens in the Dunlap collection are notable. One that really is extraordinary is Opuntia galapageia, a tree-form opuntia (as are most of the opuntias from the Galapagos Islands.) Guaranteed, you have never seen a cactus with more spines per square inch; the reason for this wicked armament is self-preservation. Giant tortoises and iguanas are especially fond of opuntia pads, so the plants, which cannot run away from their predators, had to develop stationary defenses. That included myriad sharp spines, and tree-like growth patterns to keep the pads high enough in order to be out of reach. Not to be cheated out of lunch, some of the tortoises have evolved to have shells that allow their necks to reach higher. Darwin I am sure would be pleased to hear of this.

Stenocereus eruca

Another unusual specimen is Stenocereus eruca, the creeping devil cactus. Unlike the columnar cacti, this Mexican species grows horizontally, sending down roots periodically along the stems which are heavily spined and four to six inches in diameter. Growing amid the vertically oriented cacti it makes an interesting contrast. In the mid 1960’s we were traveling south on the “as yet unpaved camino” and we passed an entire hillside completely covered in creeping devil. I hope that it still survives today because it was an amazing sight.

On the opposite end of the spectrum of these two species is Pachycereus schottii, the totem pole cactus. This species is completely spineless, the result of a mutation; it does however have the requisite aereoles which protrude from the stem making it appear as if there are faces sculpted there.

The beauty of a place like Lotusland exists because of the passion and effort (and money) of four individuals, so the public can enjoy and learn about the complexity and remarkable variety of nature.

If you are planning a trip to Lotusland you need either to call or email in advance for reservations. Because the garden is located in the middle of very expensive homes, the neighbors insisted on limiting the traffic coming and going. (I thought it remarkable that we had no such restriction on our visit to Watts Towers in Los Angeles . . .)

https://www.lotusland.org/

More Photos from the Lotusland Website

AMAZING AUSTRALIA: Adelaide Botanic Gardens

Lorie Johansen

We toured Victoria and South Australia in spring 2023 beginning our journey in Melbourne and ending in Adelaide. The Adelaide Botanic gardens had many beautiful structures. Here are photos of two of them.

The Palm House is a Victorian-era glasshouse designed by the German architect, Gustav Runge, and imported from Germany in 1875. It was opened in 1877 and was restored in 2018. It is the second-oldest glasshouse in Australia, and the only known one of German manufacture from that period left in the world,

all others having been destroyed during World War II. The sophisticated engineering techniques used in its construction make it a benchmark in glasshouse design. The hanging glass walls are similar to those used in today's city buildings and were very advanced for the time. Originally housing tropical flora, due to corrosion problems, since the early 1990s it has held a collection of arid flora from Madagascar.

The Amazon Waterlily Pavilion built in 2007 is an exquisite glass palace for the Victoria Amazonica waterlily which is found in the back-waters of South America's Amazon River. When it bloomed in 2008, the 11" flower only lasted a few days. The largest lily pad was 5 feet in diameter.

Santos House of Economic Botany

For more info about Adelaide Botanic Gardens:
https://www.botanicgardens.sa.gov.au/

Garden Brag Plants

Lorie Johansen's

Echinopsis hybrid

Lorie Johansen's

Cylindropuntia

Lorie Johansen's

Adenium obesa hybrid

Tom McCarter's

Dudlyea

From Tom McCarter

Tom McCarter's

Aloe

Deborah Pearson's

Adenium obesum

Deborah Pearson's

Uncarina roeoesilane

Deborah Pearson's

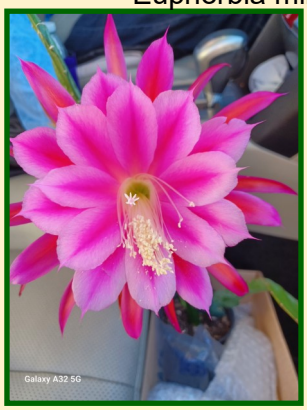
Cyphostemma curron

Marlene Walder's Garden

Marlene Walder's Euphorbia millii

Marlene Walder's Sempervivum

Barbara Raab's amaryllis



Barbara Raab's Epiphyllum

Moni Waiblinger's Hoya

Moni Waiblinger's Sedum

Moni Waiblinger's Aloe

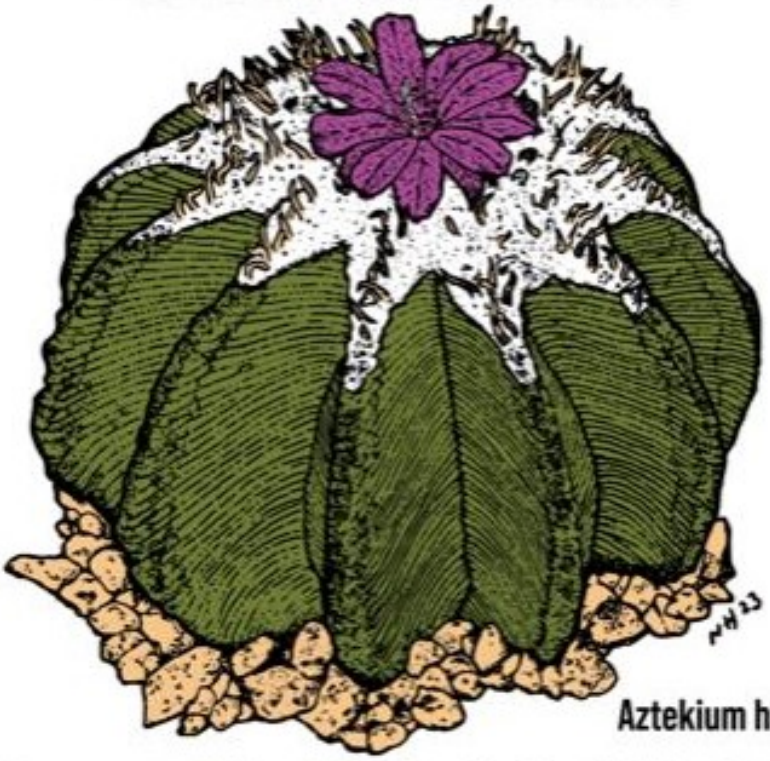
Bernie Mases' Yucca rostrata

From Christina Sangster

NEWS OF UPCOMING EVENTS

37th Annual Inter-City

Cactus & Succulent Show and Sale



Aztekium hintonii

August 4th, 2023 - Sale 8AM-5PM

August 5th & 6th, 2023 - Show & Sale 8AM-5PM

Los Angeles County Arboretum - www.intercityshow.com

Hosted by the Long Beach, Los Angeles and San Gabriel Valley Cactus & Succulent Societies

Instagram: @intercityshow Facebook Group: intercityshow

We encourage you to bring your own box to the sale

For a digital copy of the Cactus and Succulent Society of America journal click the link below:

https://cactusandsucculentsociety.org/TTP_Summer_2023.pdf

San Diego Cactus and Succulent Society newsletter:

https://mail.google.com/mail/u/0/#search/sdcss+july/FMfcgzGtvsRJjwlrRqZRrSGDQmxPKkMQ

San Diego Botanical Garden Activities

https://sdbg.org/program-calendar/

2023 CSSA Upcoming Activities

Aug. 4-6	INTER-CITY SHOW AND SALE—RESERVATIONS REQUIRED Info: www.intercityshow.com or call 805-264-6262 Plant sales 8am-5pm daily. Show open 8am-5pm Aug. 5-6 LA County Arboretum, 301 N. Baldwin Ave, Arcadia, CA
Sep. 2	HUNTINGTON BOTANICAL GARDENS SUCCULENT SYMPOSIUM 9am-3pm RESERVATIONS REQUIRED Info: Reservations: 222.huntington.org, Symposium call 626-405-3571 Huntington Botanical Gardens, 1151 Oxford Rd. San Marino, CA
Oct. 1	LONG BEACH CACTUS AND SUCCULENT SOCIETY ANNUAL AUCTION 1pm-3:30pm. Info call 714-553-6914 Women's Club of Bellflower, 9402 Oak St. Bellflower, CA
Oct. 10	CONEJO CACTUS AND SUCCULENT SOCIETY FALL SALE 9AM-4PM 558 N. Ventu Park Rd, Thousand Oaks, CA 91320 Info: www.conejocss.com or conejocss@hotmail.com
Nov. 3-5	HUNTINGTON FALL PLANT SALE—RESERVATIONS REQUIRED SAT-SUN 10am-5pm, Info: www.huntington.org. Sale call 628-405-3571 Huntington Botanical Gardens, 1151 Oxford Rd. San Marino, CA

Current Board and Volunteers

President—Robert Kopfstein—president@palomarcactus.org

Vice President—Dean Karras gnosisnursery@gmail.com

Past President, Meeting set-up—Brita Miller

Treasurer—Teri Shusterman treasurer@palomarcactus.org

Assistant Treasurer—Liz Rozycki

Secretary—Moni Waiblinger

Members at Large—Charlyne Barad, David Buffington, Lorie Johansen Event Coordinator—Charlyne Barad eventcoordinator@palomarcactus.org

Newsletter—Charlyne Barad, Michelle Leung eventcoordinator@palomarcactus.org Brag Points—David Buffington

Brag Table—Kevin Smith

Cash Register at Monthly Meetings—Teri Shusterman, Dennis Miller

Exchange Table—Brian Magone

Facebook - Annie Morgan—info@palomarcactus.org

Guest & New Member Ambassador & Plant of the Month—Lorie Johansen,

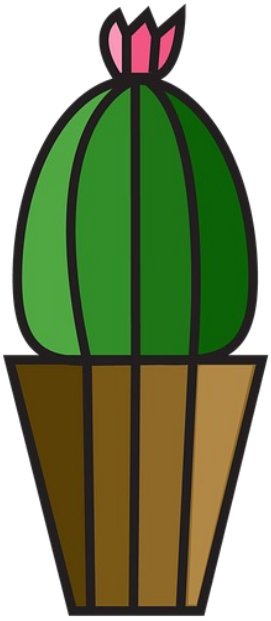
Instagram—Dean Karras—gnosisnursery@gmail.com

Library—Barbara Raab librarian@palomarcactus.org

Membership—Richard Miller

Refreshments—Sandy Wetzel-Smith, Bruce Barry

Website—Annie Morgan, Russel Ray



2023 Meetings, etc. Schedule

Jul. 22 Steve Plath, Desert Restoration

Aug. 26 Picnic at Palomar College

Sept. 23 Jeff Moore, Dudleyas

October 28, Kevin Smith, Pests in the Succulent Garden

Nov. 18 Ivon Ramirez, The Hechtias of Mexico

Dec. 16 Holiday party

Social Media

Website: www.palomarcactus.org

Instagram: palomar.cactus.succulent.org

Email: info@palomarcactus.org

Facebook for admin notices:

@palomarcactusandsucculentsociety

Facebook group for members:

Palomar Cactus and Succulent Society Group