

ESPINAS Y FLORES



The Newsletter of the San Diego Cactus & Succulent Society Inc.
Affiliated with the Cactus & Succulent Society of America

Volume 37 Number 12
Saturday December 14th 2002
NOON

Room 101 Casa Del Prado, Balboa Park



Presidents Message

Our November meeting came with the first real rain of the season and I am glad so many of you made it out to join us. As I write this, the following weekend, we are enjoying lots of sunshine and warm dry winds - is this the perfect place for succulents or what?! As usual, Woody Minnich delighted us with a spectacular slide show of the smaller cacti of Mexico along with their surrounding rocks, bugs, reptiles, and beautiful environments. It is so fun to see these plants in their native settings - especially those Astrophytums - you can't have too many Astrophytums! Thanks Woody for a great trip!

Tom Knapik gave us a good overview of the genus Copiapoia. This highly adapted genus is quite interesting - and to think they can live for many years on fog alone - maybe that is why they grow so slowly. Thanks Tom for an informative talk and thanks also to Mark Fryer for bringing in Carl Volkens' collection of Copiapoas - it was good to see such large, beautifully grown specimens. I enjoyed sharing my enthusiasm for succulent orchids and want to thank Allen Clark for bringing in those great specimens as well as adding some expertise to this talk. They really are fun and easy plants to grow and fit right in with any succulent collection.

On Thursday evening, November 14, quite a few of us showed up at the Botanical Foundation meeting to hear the presentation of the Zoological Society's proposed expansion.

Our main concern is that our access to the Prado meeting spaces not be hampered as this would greatly effect our ability to hold shows. Our concerns are shared by all the other Societies, many of whom had representatives at the meeting. The proposal is a vast change impacting the entire area from Hoover High to the Space theater. It seemed to me that the designers are very cognizant of the need to maintain access to the meeting areas - and we made sure that they know it is vital to us! Members present had mixed reaction to the overall plan, but I think less concerns regarding access.

I hope all of you are planning to attend the Holiday Party on December 14. This Party is always lots of fun and an opportunity to acquire some cool new plants. To participate in the gift exchange (this is separate from the gift plant that members receive) bring a nice plant or plant related item - be sure to put your name on it! We will also, once again have the ever popular pot-luck dessert table, all you great cooks bring something yummy. So come early to check out all the plants - we will be eating promptly at 12:30.

Don't forget our Winter Show and Sale will be January 11, 2003. It is never too early to start grooming your winter growers to show off!

Have a safe and happy Holiday Season!

Pam Badger



OCTOBER BRAG PLANT WINNERS

Judged by Tom DeMerritt

Succulents

1st Dykia " Brittle Star"	Joe Quijada
2nd Hoodia gordonii	Alan Weiss
3rd Lithops sp.	Sandy Frost
3rd Echeveria runyonii	Marilyn Henderson

Cacti

1st Ariocarpus fissuratus

NOVEMBER BRAG PLANT WINNERS

Judged by Woody Minnich

Succulents

1st Othona herrei	Rudy Lime
2nd Pelargonium antidysenterycum	Rudy Lime
3rd Foquieria fasciculata	Tom Birt
3rd Lithops montana v. bella	Phyllis Flechsig

Cacti

1st Collection of Copiapoa	Carl Volkers (brought in by Mark Fryer)
2nd Ariocarpus confusus	Jurgen Menzel
3rd Ariocarpus retusus v. retusus	Jeff Harris
3rd Coryphanta garesii	Jurgen Menzel

Thanks to everyone who brings in their interesting plants to share

The Editor apologizes for neglecting to insert the October winners in the November Newsletter.....

Desert Flowers in Southern California



by David Hale

California poppy, *Eschscholzia californica*

Everyone has heard of the spectacular wildflower displays of the Californian deserts, but understanding them, knowing the timing of their blooming, gaining access, and identifying the plants can pose problems. Nonetheless, these are easily overcome.

There are approximately 35,000 square miles of desert in southern California, primarily the Mohave Desert and part of the Colorado Desert. The Mohave (also spelled Mojave) is bounded in the north by the southern edge of the Great Basin, the area between the Rocky Mountains and the Cascade-Sierra Nevada chain. This northern area of the desert includes Death Valley. The eastern edge is defined by California's eastern border, and the southern edge by the

U.S./Mexico border. This southern part is actually an extension of the Mexican Sonoran Desert. The western border is defined by the mountains of the Sierra Nevada, and farther south by the San Bernardino and San Jacinto ranges. Elevations in the deserts range from nearly montane to below sea level (-280 feet in Death Valley). There are also higher mountains that form "islands" within the desert.

The weather is often severe: the highest temperature ever recorded within the United States 134 °, or about 56 °C occurred in Death Valley. The weather is also wildly erratic, with temperatures and rainfall varying greatly from season to season and month to month. The timing of rainfall is very important; precipitation of more than one-half inch between mid-

December and mid January is necessary to trigger the best displays of annual wildflowers. These displays, however, are vulnerable to extremes of weather. If the rain and cooler weather continue, the color and quantity of the displays increases through the weeks and months; however, a short spell of hot weather can stop the blooming. Even one day of 100 ° F (which can happen at almost any time early in the year) can do severe damage, and if it continues hot, it will end the large displays for the year. Nevertheless, almost every year has some good displays, even if limited in duration. And no year is the perfect year, that is, not all the flowers do their best in any one year. Thus, the Antelope Valley California Poppy Reserve, which hosts vast fields of the California poppy, *Eschscholzia californica*, may produce only a modest show in a year that is spectacular for various other desert plant quite differently in two seemingly similar years in response to innumerable variables that are not obvious.

Access to the deserts is quite good over a host of highways and roads through and around the region. Maps available at any good bookstore or from AAA are sufficient to guide you. If you live not too far away, driving your own car is easiest, but flying is an easy alternative, and you can use a rental car. Remember, the weather here in January and February can be wonderful. Many people fly to Palm Springs (which has its own good airport) to enjoy the winter weather. From there, it is just minutes to the early-blooming flowers. In fact, right in Palm Springs and nearby Palm Desert there may be wondrous flower

shows. To my taste, this is far more pleasing than some popular other winter destinations. Access is also quick from the major Los Angeles area airports, about 100 miles (160 km) from the nearest desert sites.

I mentioned that timing is important it's necessary to get current information on flower conditions and weather. This has become very easy in recent years. Before, you needed to know people who frequented the desert; later, information became available by phone from organizations, and now there are websites that are frequently updated. So you don't necessarily need to know the desert well to get up to date information on the best flower shows, locate the spots on the map, and drive there.

By using a good search engine on the Internet, it's possible to search for specific sites in the desert, certain parks, or towns. For example, www.google.com is one of my favorite search engines. If you type in "National Park Service" in the search window, you can click on nationalparks.org, which takes you to a website where you can access any of the individual parks. www.calparks.com is a good site for information about the Mohave parks. www.desertusa.com is a comprehensive site with many links on a broad range of subjects connected with deserts. There is information on climate, plants, and blooming times. www.desertmuseum.org has many photos of plants and the desert and information about weather. Any center will refer you to others with more data on different locales. You can get information about Death Val-

ley by calling (760) 7862331. Data especially on the western and central parts of the Mohave is available at (760) 371-3732 in Ridgecrest, California. Mohave State Park at (661) 942-0662 will tell you about the desert and blooming conditions and sites.

Two of the books I recommend cost \$10-\$12 new but should be available used at <www.abebooks.com> (don't leave the "s" off "books" or you will be sorry). <www.bibliofind.com>, now a division of Amazon.com, is equally good to search for used books. If you don't have computer access, the two books are available at various visitor centers in the desert parks.

cluding virtually every desert species. Nearly all were done from material in the field. There are also a key, a helpful glossary, and a few black-and-white ts. A plant may do photos. The text on the flowers is includes both clear plant descriptions and history and lore. The description and history of *Yucca brevifolia*, the Joshua tree, is a page and a half long.

The second book is *Shrubs and Trees of the Southwest Deserts* by Janice Bowers. Though not as vital, it is an inexpensive book with many beautiful habitat illustrations in color. Plants are arranged in sections according to flower color. There are drawings of each plant and its parts.

My wife, Donna, and I have made four trips to the southern California deserts from early March to mid June, the last to the higher mountain areas. We were lucky to be accompanied by Wayne Roderick, who has been visiting the desert regions of southern California for many years. We camped, but most of the areas we visited are accessible in a day's drive from a town with motels. There are also some accommodations in the desert parks. Again, the timing is not something that can be decided too far in advance; you have to phone or consult a website. Within a given time frame, the elevation dictates the availability of bloom, just as it would with alpiners on a mountainside.

I will describe briefly some of our favorite roads and sites. We often enter from the west through Lancaster, California, southeast of Bakersfield, passing through the poppy preserve mentioned above. If this is "popping," it is worth a roll or two of film. Nearby we



The first and most essential is *Desert Wild Flowers* by Edmund C. Jaeger, first published in 1940. It summarizes some 25 years of desert exploration, much of it on burro back. It has been reprinted and updated in the 1990s. The most use-ful part of the book is the drawings, at 50% natural size, of all the described species, in-



have seen hundreds of acres of poppies mixed with equal numbers of purple Orthocarpus (photo, p. 266). From here, we usually camp at Saddle Back Butte State Park. As Wayne says, the only draw back is that, although cars are few at night, you can hear them coming in the silent desert for five or ten miles. On April 27, 1998, we were forced to camp on top of fields of *Oenothera deltoides* in full bloom (photo, p. 267). The flowers are 3 inches (7.5 cm) across, white fading to pink. There wasn't an inch between the blooming plants that extended throughout the campground and far beyond.

The area around the campground was almost a monoculture of this evening primrose, but farther away, it blended with many other annuals, such as *Malacothrix californika*, a daisy with lemon-colored flowers; *Coreopsis bigelovii*, a bright yellow-flowered daisy; and *Abronia vilosa*, appropriately called desert verbena, which is magenta-flowered. All of these were present in sheets (photo, p. 266).

These annuals are well adapted to the severe climate of the desert. Their seeds are primed to sprout only with the appropriate amount of moisture and only at the right time of year. Otherwise, they might germinate too close to the hot

summer or the colder weather of early winter. I've collected seeds of 20 or 30 different species of these annuals and have been unable to get a single one to germinate, so we must enjoy them in their own home.

Other adaptations to the desert climate are familiar. Besides the cacti, desert shrubs especially adopt similar characteristics. Some have tiny rolled, cylindrical, or waxy leaves to limit moisture loss. Others produce leaves at all only in moister years. The Ocotillo, *Fouquieria splendens*, is a shrub sprouting from the base. It grows progressively lusher with increasing moisture levels. Finally, in the best years, it has many leaves and bright red flowers. In the dry years, it is only a bunch of sticks.



On April 3, 1995, Wayne, Donna, and I entered Joshua Tree National Monument from the south out of Palm Desert near Palm Springs. The entrance is at about 500 feet elevation, gradually rising to about 2500 feet near the park office and visitor's center, farther to the north it drops back down. There is a camp-ground near the north entrance. We entered early in the morning, and eight hours later we had traveled only about five miles because of our frequent stops to view flowers. The desert is never entirely covered with bloom, but the color occurred in great patches. There were repeats of the plants mentioned above, as well as hillsides of electric blue *Phacelia campanularia*, and sheets of *Lepidium flavum*, known as yellow pepper grass, a tiny plant with bright yellow flowers which, when stuffed in your sandwich, gives it a light, delightful peppery taste. *Mimulus bigelovii*, bright pink in flower, grows low to the ground. (These sheets of color are difficult to photograph properly because the photo always seems to show many fewer plants than the eye beholds. Sometimes standing away from the plants that you want photograph and using a lot of telephoto will bring the plants together, giving the scene more verisimilitude.) *Datura meteloides*, looking like a giant petunia, was alongside the road. Every few yards we stopped to photograph, sometimes backing up more than going forward.

Because of their adaptations, the parts of desert plants frequently have aesthetically pleasing features. The textures and hairiness of the leaves often lends an attractive appearance. The desert willow,

Chilopsis linearis, a shrub to 15 feet, has handsome trunks whose black bark is etched with fine lines. The flowers are large pink trumpets.



The desert is a full feast of flowers, plants, and interesting geological features, with a colorful history worth investigating. So the next time you've had too much rain, snow, or cold in late winter and are yearning to see some color, this should be your destination, to see clear blue skies and feel the warm sun of southern California as it strikes a glow from the carpet of desert wildflowers.

David Hale, a retired physician, writes a regular column in the Rock Garden Quarterly. He and his wife, Donna, maintain two gardens in Portland and on the Oregon coast and enjoy traveling throughout the world, though not neglecting North America. David frequently lectures to NARGS groups.

The Editor thanks Joe Kraatz for this article and obtaining permission to print.....

SAN DIEGO CACTUS & SUCCULENT SOCIETY

MEMBERSHIP APPLICATION

The San Diego Cactus & Succulent Society is a nonprofit, hobby organization (affiliated with the CSSA) created to stimulate interest in succulent plants. This society brings together people with a common interest for the purpose of educating the public about the beauty and uniqueness of these remarkable plants, encouraging proper collecting and maintenance of the plants through preservation of native habitats and horticultural propagation, and to foster good fellowship. You are invited to join our society, whether you are an expert, amateur, or a beginner with an interest in unusual plants and flowers. You will receive our publication *Espinas y Flores*, one of the best cacti and succulent newsletters. We produce 11 issues a year. You will get great articles and keep up with club news for the next year.

Our meetings are on the second Saturday of the month (except June and September) and newsletters are received the week of the meeting. We offer knowledgeable speakers who present educational & entertaining programs; many are world renowned scholars, botanists, explorers and authors. The San Diego Cactus & Succulent Society's Annual Show and Plant Sale occurs the first weekend of June in Room 101, Casa del Prado, Balboa Park, San Diego. A wide range of succulent plants, ceramic pots, and growing supplies are available during most meetings. There is also a plant exchange table and a library. For more information regarding membership or the club, please write to the address below or look us up on the web at SDCSS.COM.

Yes, I/We wish **JOIN** or **REJOIN** the San Diego Cactus & Succulent Society.
(circle one)

NAME(S): _____

ADDRESS: _____

CITY, STATE, COUNTRY & ZIP+4: _____

PHONE/FAX/E-MAIL: _____

AMOUNT ENCLOSED: \$ _____

Do you know that for an additional \$5.00 paid on your membership dues - you can have *Espinas y Flores* delivered by first class mail, instead of bulk mail?

Check here and add \$5.00 to your dues payment, if you are far away you will receive our newsletter faster.

Dues are \$15.00 per person, \$5.00 for each additional person in the same household for (bulk rate USA), add \$5.00 for First Class Delivery (optional). International dues, including Mexico and Canada, are \$30.00 (US funds), additional members as above.

Thank you for joining the SDCSS

SEND THIS FORM TO: SDCSS - Treasurer/Membership, P. O. Box 33181,
San Diego, CA 92163-3181

Coast Barrel Cactus Transplant Program Miramar Landfill

The Coast Barrel Cactus, known in the biological community as *Ferocactus viridescens*, exists only on the coast of Southern California, from Del Mar to Northern Baja California -- an area of rapid urban development.

The destruction of suitable native habitat for the Coast Barrel Cactus has forced the U.S. Fish and Wildlife Service to consider this species a candidate for endangered status. Communities of the Coast Barrel Cactus are indigenous to the City of San Diego's 1,430-acre Miramar Landfill. A goal of City Environmental Services Director Richard L. Hays is to return closed landfill areas to their natural integrity as active landfill areas reach capacity. An important component of this restoration program has been the transplanting of the Coast Barrel Cactus from active landfill areas, where it may be endangered, to a closed landfill section about a half -mile away, atop thousands of tons of buried trash. This area is known as West Miramar Phase II. Beginning in June, 1991, the Environmental Services Department's Refuse Disposal Division's environmental staff -- with the help of County laborers -- began transplanting what would amount to nearly 300 Coast Barrel Cacti. Using a transplanting protocol that was developed by Caltrans for similar relocation plans, the cacti were uprooted with a pick axe (rather than a shovel) to protect the root.

- ◆ The cacti were then stored on wood pallets upside down in the shade. The area was kept dry and away from insects. The roots were cut smooth and allowed to callus over. This process takes at least two weeks.
- ◆ Another consideration was that the south-facing side of the cacti, when replanted, had to be facing the same direction in its new location. Without taking this into consideration the cacti would not grow properly.
- ◆ Over 90% of the transplanted cacti have survived the transplant, meeting all environmental staffs expectations.
- ◆ The healthy cacti can now be found in clusters scattered among the coastal sage scrub and chaparral, particularly on dry, southern facing slopes.

Upcoming Events

2002

December 14th San Diego C&SS Holiday Party. Noon, room 101 Casa del Prado, Balboa Park. See details in this issue of EYF

2003

February 21 - 23 C&SS of New Zealand AGM and Convention. Wellington, New Zealand at the Angus Inn, Waterloo Road, Lower Hutt, Wellington, New Zealand. Info from Frances Verrity at verrity@actrix.gen.nz

May 18 (Sunday) Epiphyllum Society of America's Show and Sale. Ayers Hall, Arboretum of LA County, Arcadia CA. Information: www.epiphyllum.org

June 1 Toronto C&S Club Show and Sale at Civic Garden Centre, Edwards Gardens, 777 Lawrence Ave. East, Toronto, Ontario, Canada. Sunday 10am - 4.30pm. Information from Dave Naylor 905-877-6013 or e-mail him at naylor@unforgettable.com

June 14-19 (Sunday through Thursday) CSSA 30th Biennial Convention, St Louis MO hosted by the Henry Shaw Cactus Society.

In 2003, the Henry Shaw Cactus Society will host the 30th Biennial CSSA Convention in St. Louis. From the welcome reception on June 14 to the farewell party on June 19, prepare for a full schedule of education and fun. Enjoy hunting plants at the BIG cactus sale, too. (No sales on field trip days.) Sunday and Monday are "Succulent Days," with over a dozen presentations by noted speakers. Sunday's special banquet speaker is Missouri Botanical Garden Director Peter Raven, who will discuss endangered cacti of the United States. Tuesday features field trips to Missouri Botanical Garden, Forest Park attractions, Cass Bonsai Garden -- even a riverboat cruise. Wednesday and Thursday resume with "Cacti Days" and more informative programs by a group of international scholars and botanical experts.

July 5-6 CSSA Show & Sale, Huntington Botanical Gardens, 1151 Oxford Rd, San Marino CA.

August 30 Huntington Symposium, Huntington Botanical Gardens, 1151 Oxford Rd, San Marino CA. Info: 626-405-2160 or 2277

August 31 CSSA Board Meeting, Huntington Botanical Gardens, 1151 Oxford Rd., San Marino CA.

2004

C&SS of New Zealand AGM and Convention, Palmerston North, New Zealand. Info from Frances Verrity at verrity@actrix.gen.nz

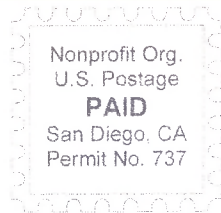
August 21 British C&SS National Show, Spalding Exhibition Centre, Springfields, Spalding, Lincs, England.

November (3-week tour tentatively planned for November 2004) CSSA Tour to Chile, home to Copiapoa, Eriosyce, Eulychnia and others. See more details on page 31. Watch for further announcements. Contact: Dan Mahr

2005

Early August CSSA 31st Biennial Convention, Phoenix AZ in air-conditioned comfortable hotel.

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Espinas & Flores

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