



Mammillaria thornberi

Espinas y Flores

The Newsletter of the San Diego Cactus & Succulent Society

Affiliated with the Cactus and Succulent Society of America

Volume 47 Number 8

September 2012

SEPTEMBER AGENDA

It's PICNIC Time!"

Saturday, September 8, 2012, 9:am - 2pm
Lunch at ~ Noon

Admiral Baker Recreation Area
2400 Admiral Baker Road
San Diego, CA 92120

INSIDE THE EyF

Directions to the Picnic

Article of the Month: Stan Yalof
"Conversations With Cactus"

Note of the Month: Art Cooley
"The Power of Succulents"

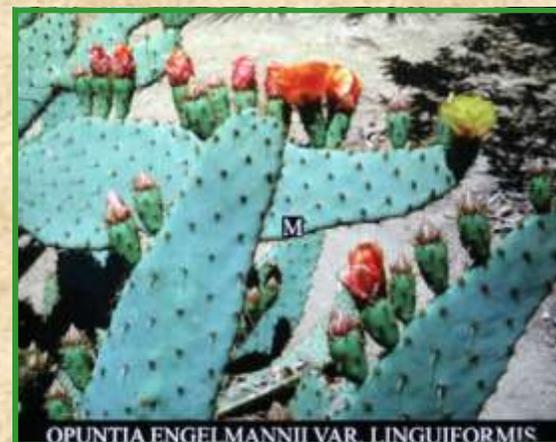
Report on the ICCSS Show



OPUNTIA FICUS-INDICA



OPUNTIA ROBUSTA



OPUNTIA ENGELMANNII VAR. LINGUIFORMIS

PRESIDENT'S MESSAGE

28 August 2012



After a short reprieve from too damn hot and humid, it seems to be back. Weird weather for sure.

We had a great meeting in August. The Cactus Transplanting Workshop before the meeting was well attended and hopefully you came away from it with a nugget or two you didn't have before. What I shared was many years worth of listening to others talk about the topic. My hammer technique for un-potting seemed to be well received. For those of you that did attend, I'd like you to know that I finally transplanted the *Opuntia* the other day – very carefully.

Our pre-meeting sale and socialization was great as usual. While missing some of our vendors we still had a nice assortment of pots and plants for sale. **Susan Hopkins, Ken Blackford, Joe Kraatz, Jim DeForest and Cathy Clark** were there as the team for set up, sales, greeting, and anything else I could think of. **Steve Harris and Don Hunt** had the library available for the book addicts. Other members supported set up and are always welcome to help. It's absolutely true that it takes a village to run our meetings!

Kienan Parr did double duty. He gave a wonderful Plant of the Month presentation on hybrid *Echeverias* titled "A Journey into Color and Form" and he did his usual great job running the Benefit Drawing.

After our break **Erik Gronborg** did a very interesting presentation titled "Prickly Pears – Botany and History." His talk started with pictures of plants, journeyed a bit into history and uses of *Opuntias* and other succulents plants and a parasite or two. One of the plants he talked about was *Opuntia fragilis* – which I learned at the Sonora Symposium in Tucson last April could have been spread through out the US by buffalo migration.

Our Coffee in the Garden in August was held at the home of **Bev Grant and Art Cooley**. The yard was wonderful and we had a great time socializing and looking at plants. The next Coffee in the Garden will be at **Peter Walkowiak's** home. As usual he will combine it with a plant sale.

Our Picnic Meeting will be on September 8th at Admiral Baker's Field off Friar's Road in San Diego. See directions and a map later in this issue. We will start getting ready a little after nine with hopes to start eating before noon. This is a great chance to get to know other members and catch up with old friends. Please contact me if you are coming so we can get a head count for the meat.

December this year will be the last month for many of our existing officers and directors. We have a two term limit on positions and most are termed out. The Nominating Committee has been established and I am the Chair. If you have an interest in being involved with this organization at the board level or know someone you think would be an asset to the board please let me know.

I'm looking forward to seeing you all at the Picnic! Stay cool.

Chris Miller



Open House At the Home of Peter Walkowiak and Inacia Matheus



Saturday, September 29th, 2012.

Time: 1:00 pm - until everyone's too pooped to party.

Please R.S.V.P. (contact info below).

You've seen some of my plants at various shows, but there are many more to see and many of you have indicated an interest in seeing the entire collection. Sales inventory is available as well. We will provide snacks, lemonade and iced tea. If you'd like something with more spirit, please feel free to bring it along.

Location: 1172 Avocado Ave
Escondido, CA 92026
Peter's Ph# 858-382-1797
Inacia's Ph# 760-415-5105
E-mail: hciservices@gmail.com

Directions (TRUST THESE DIRECTIONS, not maps)

15 freeway, exit El Norte Pkwy which is 1 mile north of highway 78

Right turn from northbound - head east

Left turn from southbound - head east

Seven Oaks Rd - immediate RIGHT turn (frontage road)

Borden Rd - 1/4 mile - LEFT turn

Avocado Ave - 1/2 mile - LEFT turn

This is the tricky part...1/4 mile on Avocado Ave there is an unmarked cul-de-sac. The house on the corner has a white block wall about 2 feet high. This IS PART of Avocado Ave, not a different street. Turn left up this cul-de-sac. At the end of the cul-de-sac there are two parallel driveways on the right. Ours is the one on the right. We will have a sign at the bottom of the driveway indicating 1172. Park in cul-de-sac, if you pull nose in at the front of the dirt hill, we can fit more cars.

The SDCSS Annual Picnic

Where: Admiral Baker Field Recreation Area.

View using Google or at <http://www.militarycampgrounds.com>.

When: September 8, 2012.

Time: Volunteers will start prep work at 9.

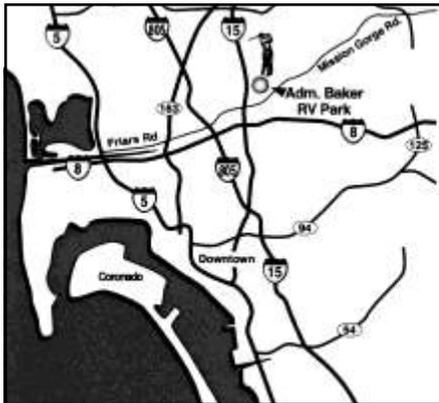
Lunch will be ready around noon.

Bring: Side dishes, deserts, finger food. The Club will provide hot dogs, hamburgers, veggie burgers and drinks.

RSVP: If you haven't already signed up, send **Chris Miller** an E-mail at <mailto:c.miller@cox.net>, or call her at 619-258-9810 to let her know if you are coming and what you are bringing. We need to have a general idea of numbers so we can buy enough meat, etc.

There are plenty of tables in the picnic area and lots of lawn around it for us to gather. The picnic is a great way to get to know each other better and catch up with old friends.

The board decided to keep things easy for this picnic so we will not be having a silent auction.



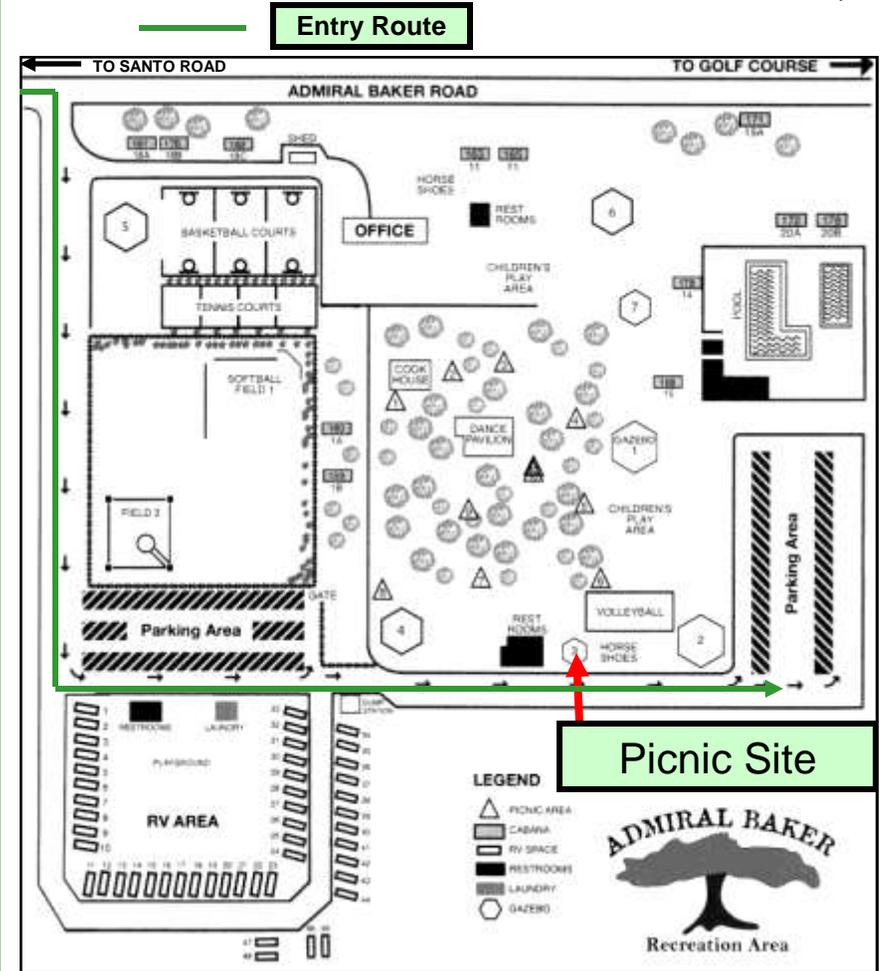
DIRECTIONS Located one-half mile east of Interstate 15 at the intersection of Friars Road and Santo Road, Admiral Baker RV Park can be reached either from Interstate 8 or Interstate 15.

From Interstate 8 - Exit Mission Gorge Road. Right on Mission Gorge Road to Friars Road and turn left. Continue on to Santo Road and turn right. Make an immediate right onto Admiral Baker Road and follow it down the hill. At the bottom of the hill turn right into the parking lot.

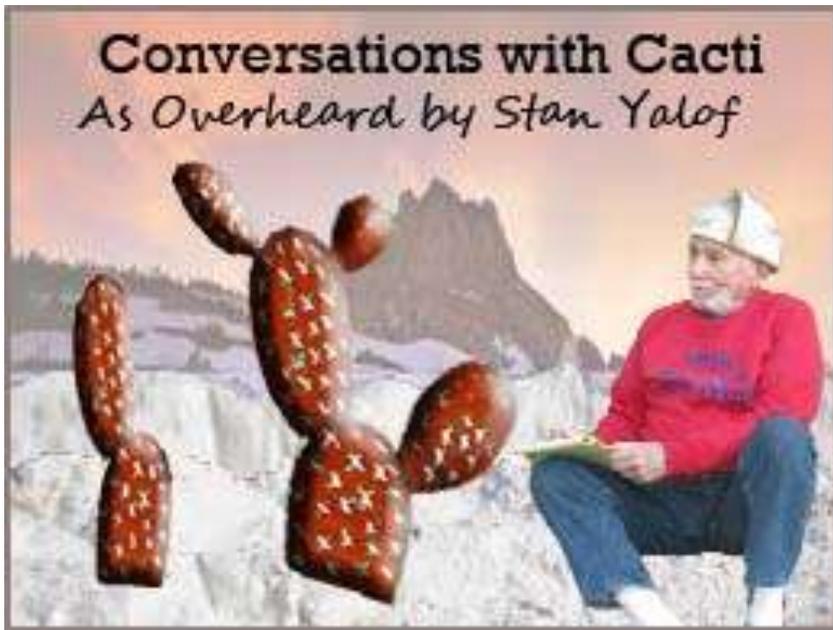
From Interstate 15 - Exit Friars Road East. Follow Friars Road to Santo Road. At Santo turn left. Make an immediate right onto Admiral Baker Road and follow it down the hill. At the bottom of the hill turn right into the parking lot.



Admiral Baker recreation area map



Article of the Month



The old *Opuntia*'s clade looked over the snow drift. Shivering below was a smaller plant. "Shivering cladodes, dad, being a cactus is hard."

"Keep in mind, little one, that we cacti are the toughest of the tough. And it is just this stress that has pushed us to the apex and blessed us with around 180 genera and 2,000 species."

"I could do with less stress and fewer cousins!"

"Be patient. Warmth is coming. I sense that the percent of daylight is growing. According to my Almanac I should begin budding a few days past the equinox. And that also goes for the other *Opuntias* hereabouts."

"Couldn't we wait for the equinox further south?"

"You young ones need patience. Global warming is advancing in our direction at a quarter mile per year. Give it a hundred years and this place will be balmy."

"A hundred years, the sun will fry and crack our cladodes."

"Maybe other plants and animals, but not us. We are Caryophylles! Our Order and particularly we Cactaceae produce betalain."

"And this stuff helps us?"

"Well I'm not a chemist, but could be...? On my cladode Wi-Fi I hear it's being sold as an anti-oxidant. Besides coloring our flowers, it could col-

lect in our apical meristem at our tips and allow us to withstand searing ultraviolet for hundreds of years without a crack on the noggin¹."

"Brr, there must be nicer places down south."

"Warmth, certainly. But this venue has certain charms."

Sarcastically, "I can't wait to hear what they are!"

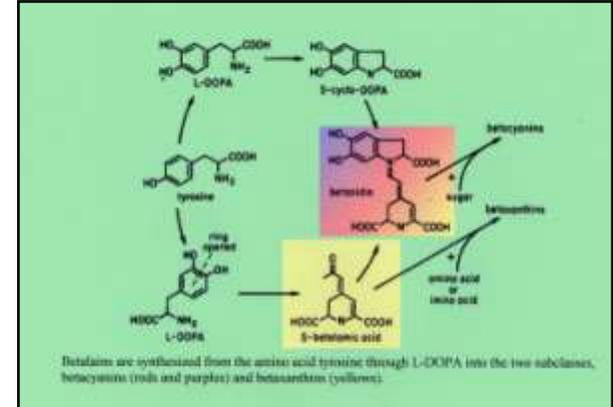
"Well we Cactaceae are tough. But all plants and animals live with stress. Indeed, without stress, why bother evolving? We have an edge with our ability to wait out drought. We can take hot sun. And we grow slow, patiently waiting out poor times, and surviving poor soils. Here the game tilts to us. As we travel north we move into richer glacial sediments. A small gain, but an advantage, and little competition!"

"So we're being miserable, all for grit!"

"Don't underestimate the power of sediments. They have a long, long, history. None of us would be here without them. A little history, young'un."

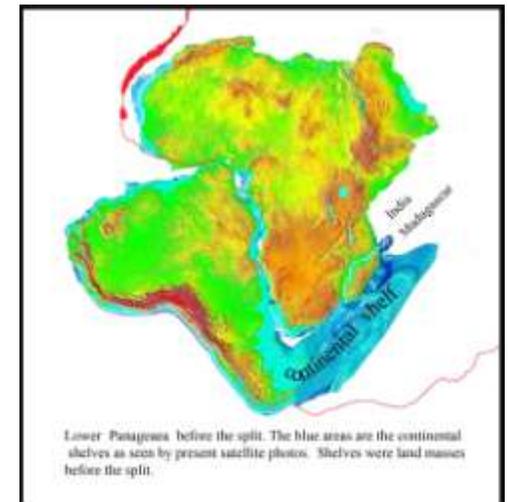
"Five hundred million years ago the living world was microscopic. Large blocks of land had drifted together to form the super-continent of Pangaea. It included what was to become the continents of today. A gigantic freeze had previously covered the land with glaciers, later called Snowball Earth. As they retreated, they released water and flushed nutrients across the land and into the sea. Some believe that this kick-started the rise of animals and we plants²."

"Sediments, huh. Well that was a long time ago."



The Production of betalain starting with amino acid tyrosine

Indeed, without stress, why bother evolving? We have an edge with our ability to wait out drought. We can take hot sun. And we grow slow, patiently waiting out poor times, and surviving poor soils. Here the game tilts to us. As we travel north we move into richer glacial sediments. A small gain, but an advantage, and little competition!"



Pangaea

“Still true today. Life on Earth depends on them. Mountains and rivers and volcanoes feeding the Nile, Ganges, Brahmaputra, Mekong, Yangtze, Yellow River, Colorado, Mississippi, Rhone, Rhine, Rockies, Alps, Urals³ ...”

“...and then we appeared?”

“Not yet. First simple plants like mosses came on land, then others, vasculars, like ferns, horsetails, cycads, conifers. The borders of Pangaea were lush, but the interior began to dry out.”

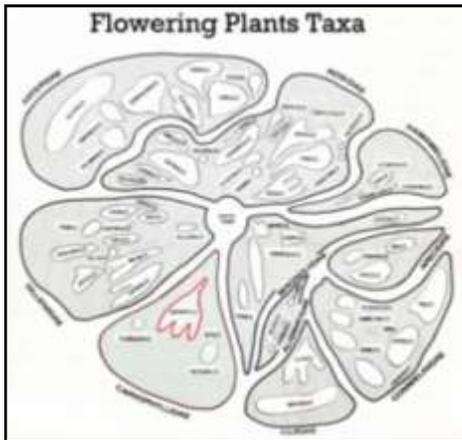
“...and then we appeared?”

“Not yet! A new kind of plant, scrappy and tough, appeared, about 140 MYA, in the Cretaceous period. Let’s call it Mama⁴. Right in the middle of dinosaur time. This was the beginning of us Angiosperms.”

Anticipating the next question from his youthful charge, the old Opuntia hastened to add, “That means enclosed seed, added protection, but more than that, a food supply was provided for the emerging seedling. First flowers weren’t much, but given time, wow!”

“...and then us?”

“Almost. Mama evolved into about 10 Sub-classes. We are within Sub-class Caryophyllidae, which includes our order Caryophyllales, proud carriers of betalain.”



Angiosperm Taxa

“...and that’s us?”

“...and a lot of our cousins. There are about 10 families and 10,000 species in Caryophyllales, including *Aizoaceae* (ice plants), *Portulacaceae* (purslane, portulaca), *Cactaceae*, etc. We cacti have about 200 genera, 2,000 species. How we are related to each other was a mystery. But now we have a pretty good idea.

Some time back, plant taxonomists such as Arthur Cronquist played with the family tree. They weren’t quite sure, but they suspected that cacti were related to African ice plants.

Then with DNA analysis by Mark Hershkowitz of the Smithsonian, not only was the family relationship deciphered, but the ancestor of cacti was identified.

“So which part of *Cactaceae* did we Opuntiads come from?”

“That is a very good question!”

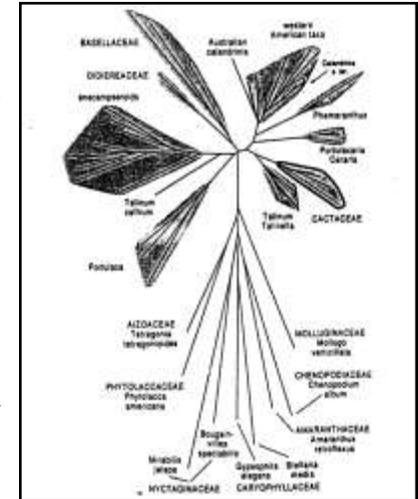
1). Betalain in the plant world is found only in Order Caryophyllales, which includes beets, Bougainvillea, ice plants, and Portulacaceae. It replaces anthocyanin as a pigment. As discussed in a previous talk on hallucinogens, betalain is a side product in the synthesis of mescaline from the amino acid tyrosine. It is the opinion of the author that this could be the critical sun-block for cacti scalps.

2). Snowball Earth’s effect on the rapid evolution of animal life due to glacial runoff is briefly treated in *Scientific American*, Feb. 2011, P 32, in the book *Snowball Earth*, and by articles in *Nature* and elsewhere. The ‘snowball’ glaciers occurred 635 to 750 MYA and studies have suggested that it once may have been possible to ski from pole to pole. Measurements revealed a large spike in phosphorus as the glaciers melted, causing downstream poisoning, and fish and wildlife extermination.

3). The effects of sediments depositing through river valleys are treated in a highly recommended book, *Collapse, Jared Diamond, Penguin, 2005, P366*, and elsewhere. Their beneficial effects on soil, grassland, wetland, fresh water, fish & mollusks, and navigation are discussed. The financial costs of fouling this ecology are much greater than the supposed economic needs of business.

4). AKA, the Ancestral Complex.

In Appreciation: Opuntia drawings are my modification of one by Ron Chisum.



Herskowitz TaxaTree



Talium Afarensis

The power of succulents Art Cooley



The National Convention of the Cactus and Succulent Society of America was held in April 2011 at the Marriott Hotel in Mission Valley. In preparing for that convention, we asked the Marriott to plant cacti and succulents in their courtyard replacing their higher maintenance plants. They agreed, and after completing the job, calculated that their return on investment was three years which in 'business speak' is a favorable return. Recently, I returned to the Marriott to see the plantings and inquired about Marriott's continued use of drought tolerant plants - cacti and succulents. Bud Stevens, the Director of Engineering, continues to be very enthusiastic about the plantings, and, as you can see (photos below), they have thrived. Further, he reported that many guests request to have their pictures taken in front of the plants. And, finally, Stevens stated, "The plants are doing so well that we are taking seedlings from the main courtyard and replanting them elsewhere on the Marriott property." All in all, this effort to 'green' our convention has saved Marriott money, pleased their guests, and provided the hotel with seedlings to expand their drought resistant plantings. This is a win-win. Congrats.to all in SCDSS for 'spreading the word.."



Photos by
Art Cooley



August 2012 Brag Table Winners Judged by Phyllis Flechsig and Jerry Garner



CACTUS

Novice

- 1st - **Bea Ericksen** – *Mammillaria*
- 2nd - no name – *Stenocactus*
- 3rd - **Pat Bryan** – *Gymnocalycium friedrichii*

Intermediate

- 1st - **Jim DeForest & Chuck Ramey** – *Echinopsis crest*
- 2nd - **Don Hunt** – *Tephrocactus mandragora*
- 3rd - **Don Hunt** – *Opuntia rutila*

Advanced

- 1st - **Phyllis Flechsig** – *Stenocereus gummosus monstrose*



SUCCULENTS

Novice

- 1st - **Ed Wirth** – *Echeveria "Blue Curls"*
- 2nd - **Ed Wirth** – *Adansonia digitata*
- 3rd - **Bea Ericksen** – *Aloe 'Firebird'*

Intermediate

- 1st - **Kienan Parr** – *Echeveria laui*
- 2nd - **Bev Grant** – *Aloe "Pink Blush"?*
- 3rd - **Jim DeForest & Chuck Ramey** – *Senecio crest*

Advanced

- 1st - **Tina Zucker** – *Adenium obesum*
- 2nd - **Rudy Lime** - *Fouquieria purpusii*
- 3rd - **Phyllis Flechsig** – *Adromischus maria-nae v. herrei*



Submitted by **Candy Garner**



Report on the 27th Intercity cactus and succulent show August 11-12, 2012

This show, held annually at the Los Angeles County Arboretum in Arcadia, is arguably the biggest show of its kind in the country. It is sponsored by three clubs, the Los Angeles, the Long Beach, and the San Gabriel Valley Cactus and Succulent Societies. Over 1000 plants were entered this year, submitted by 79 participants from up and down the state. Fifteen members of the SDCSS entered 208 plants, most notably **Peter Walkowiak** with 36 entries in the highly competitive "Open" class. He came in 4th in total points won (6/3/1 scoring), had High Points in Cactus Open and garnered two trophies, Best Caudiciform (*Ipomaea platens*, see photo at right), and Best Mammillaria (*Mammillaria perezdelarosa*). **Petra Crist** entered 15 plants in the Open Class, took High Points Succulent Open, and won three trophies, Best Anacardiaceae (*Pachycormus discolor*), Best Euphorbia (*Euphorbia schoenlandii*), and Best Fouquieria (*Fouquieria fasciculata*).



Michael & Joyce Buckner entered 7 plants and won two trophies, Any Other Genus (*Zamia furfuracea*) and Best Staged Plant (*Ficus lutea socotrana*). **Woody Minnich** entered 5 plants and won two trophies, Best Aloe (*Aloe pearsonii*) and Best Cereus (*Haageocereus pseudomacrostele*). **Tim Harvey** entered 10 plants and won Best Aloe Hybrid Miniature (*Aloe 'Inflamed'*). **Arnold Chaney** entered six plants and won Best Haworthia (*Haworthia 'Koriazto x ?'*). Other participants and their plant totals: **Calvin & Cindy Arakaki** (22), **Jim Hanna** (16), **Carol & Paul Maker** (15), **John Matthews** (15), **Duke Benadom** (10), **Cliff Meng** (10), **Joe Wujik** (7), **Jerry Williams** (7), and **Miles Anderson** (6). Of the trophies available to all three classes, three were won by Novice entrants, ten by Advanced entrants, and 29 by Open entrants (which perforce included professional growers). Interestingly, the Grand Sweepstakes Award, for most points, went to a Novice entrant, **Kim Thorpe** who entered 33 plants.

El ibet's corner



UPCOMING EVENTS

- Sep 8:** SDCSS picnic at Admiral Baker Park
- Sep 23:** Long Beach Cactus Club Annual Plant Auction, noon, 18127 South Alameda St., Rancho Dominguez, CA
- Oct 13:** SDCSS regular monthly meeting.
- Nov 3 & 4:** San Gabriel Valley Cactus & Succulent Society Show & Sale, LA County Arboretum, 301 No. Baldwin Ave., Arcadia, CA
- Nov 10:** SDCSS regular monthly meeting

photos from August events



This amazing *Tephrocactus geometricus* from **Ron Harris** took Best Opuntieae at the ICCSS



Best Agave, *A. victoria reginae*, at the ICCSS from Novice entrant **Mary Brumbaugh**.



Lady Plant at Bev Grant and Art Cooley's Coffee in the Garden (CitG) party



Chatting in the shade at the CitG



Fat cat at the CitG



Exchange Table at the August 13 meeting. Bring something in, take something else home.

Electronic Espinas Y Flores

The newsletter is available for viewing and downloading at the Club website, www.sdcss.net. Take a look! All members are urged to accept the e-mailed version of the newsletter in lieu of a bulk-mailed hard-copy. Each month, you will be notified by e-mail of the availability of your next issue, the speakers and events at the next meeting, and other significant announcements. **The electronic version contains extra color images not found in the hardcopy**, and a high resolution version, from which fully detailed images can be downloaded, is also available. Further, updates and errors found in the hardcopy are corrected in the electronic version. To cancel your hard copy, contact the membership chairperson **Collette Parr** at collette.parr@cox.net.

SDCSS WANT ADS

If you are looking for a way to help, here are some ideas:

Club Treasurer. This important Club Office will be vacated at the end of the year. No financial experience needed, only a stick-to-it attitude!	Ride coordinator: Point of contact for those members who need a ride to meetings and those willing to give rides.	Strategic Team Members to support the Strategy Owners in initiating changes in SDCSS
Trophy Chair to maintain trophies and oversee their refurbishment	Workshop Chair to run workshop program, set up speakers and topics	Tour Chair to arrange Coffee in the Garden tours on a monthly basis
Volunteers for WAP Gardens: For garden maintenance, new area development, plant identification and to work in the greenhouse, Our next project will be to build a greenhouse and we hope to start later this fall		Holiday Party Decorating Committee Members: to help decorate for the Holiday Party.

Contact **Chris Miller** if you are interested.

Opinions expressed in articles and editorial comments are solely the opinions of the author or the editor and do not necessarily represent the opinion of the SDCSS, the Board of Directors or the organization as a whole. All material submitted to the *Espinas Y Flores* for possible publication may be edited in form and content. All material contained in the *Espinas Y Flores* may be reprinted by other non-profit organizations (unless permission is expressly denied in a note accompanying the article.) Please send one copy of the printed material to the editor. Reproduction in whole or part by any other organization without the express consent of the editor is prohibited.

The due date for submission of all material to be published in EyF will be the second-to-last Saturday of the month preceding the next monthly meeting. All submissions are to be made to the Editors. Please e-mail your articles to **Paul & Carol Maker** at pdmaker@roadrunner.com.

Otherwise unaccredited photos are the handiwork of the Editors.

SDC&SS MEMBERSHIP APPLICATION / RENEWAL FORM

Dues are \$15.00 per year per individual, and \$5.00 per year for each additional household member. Newsletter is E-mailed. **Mailed paper copies are available for an additional \$5 a year.** Each member has all the rights and benefits of the organization.

Annual Dues – (E-mail Newsletter) \$15.00 _____
 First class delivery USPS (Paper Newsletter) \$5.00 _____
 Annual Dues – International (Paper) \$30.00 _____
 Additional Household Member(s) \$5.00 _____

Amount Enclosed \$ _____

Check **ONE** for type of membership: **NEW** _____ **RENEWAL** _____

Member Information:
 (Please PRINT to fill in ALL blanks below!!!)

Name: _____

Address: _____

City and State: _____

Zip + 4: _____

Phone Number: _____

Cell/FAX: _____

E-mail Address: _____

Additional Household Members:

Do you wish to receive E-mail notifications of Club events and issues?

Yes _____ No _____

Mail this form or a copy, along with a check or money order payable in US Funds to SDCSS to:

**SDCSS Membership Department
 c/o Collette Parr
 7924 Grape Street
 La Mesa Ca 91941-6323**

San Diego Cactus & Succulent Society

Executive Board

President: **Chris Miller**
 Vice President: **Peter Walkowiak**
 Secretary: **Candy Garner**
 Treasurer: **Ken Blackford**

Directors

Steve Harris
Don Hunt
Jerry Garner
Cathy Clark
Kelly Griffin
Vanessa Nelson
Mark Fryer (ex-President)

Standing Committees & Sub Committees

Education, Conservation & Exhibits

Conservation: **Joe Kraatz & Herb Stern**
 Brag Table: **Candy Garner**
 Plants of the Month: **Don Hunt**
 Summer Show: **Peter Walkowiak**
 Winter Show: **Peter Walkowiak**
 Historian: **Terry Parr**
 Library: **Don Hunt, Chris Miller, Jeanette Dutton, Steve & Kathy Harris**
 Exchange Plants & Seeds: **Michelle Heckathorn & Sara Schell**

Sales, Meetings, Plant Sales & Supplies

Membership: **Collette Parr**, collette.parr@cox.net
 Mailing: **Jean & Bill O'Daniel**
 Annual Sales: **Chris Miller & Joe Kraatz**
 Auction & Holiday Plants: **Lee Badger & Tom DeMerritt**
 Monthly Plant Sales: **Joe Kraatz & Lynn Elliott**
 Monthly Supply Sales: **George & Jerry Plaisted**
 Benefit Drawing Table: **Collette & Terry Parr**
 Publicity: **Tom DeMerritt & Joe Kraatz**
 Programs: **Kelly Griffin**
 Reception: **Susan Hopkins & Judy Walkowiak**
 Monthly Regalement: **Cathy Clark**
 Picnic Regalement: **Laura & Tom DeMerritt**
 Hospitality: **Sara Schell**

Liaison

Balboa Park Desert Garden: **Susan Hopkins**
 CSSA Affiliate Rep: **Peter Walkowiak**
 SD Botanic Garden: **Phyllis Flechsig**
 SD Botanical Garden Foundation: **George Plaisted**
 SD Floral Association: **Jeanette Dutton**
 SD Zoo Safari Park Baja & Old World Gardens: **Chris Miller**

Editors: **Paul & Carol Maker**, pdmaker@roadrunner.com

Webmaster: **Gunnar Eisel**

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