

# CALIFORNIA NATIVE PLANT SOCIETY San Diego Chapter Newsletter

#### **CHAPTER MEETING**

Tuesday, February 17 Casa del Prado, Balboa Park Room 104, 7:00 p.m.

# Mission Trails Regional Park Has Something for Everyone by Jay Wilson

There is much more to do at Mission Trails than climbing Cowles Mountain! Jay will give an overview of Mission Trails Regional Park with its unique treasure-trove of natural resources, which include gems that appeal to everyone: engaging in nature activities in the Visitor Center; participating in free monthly art exhibitions and concerts; communing with nature at the Kumeyaay Lake Campground; learning about native plants and wildlife during guided nature walks, while meeting new friends with similar interests; exploring the 1,000-acre "West Sycamore" Nature Area, the most recent addition to the Park; and much more. The presentation will emphasize endemic plant species in the Park and spur a spirited information-sharing discussion about the "natural treasures" encountered during Park excursions by audience members.

**6:30 p.m.** — Natives for Novices. Contact Nativesfornovices@cnpssd.org for info.

**7:00 p.m.** – refreshments, browsing, socializing.

**7:30 p.m.** – presentation.

# FIELD TRIP TO TECOLOTE CANYON

Visit the less-known and less traveled north side of Tecolote Canyon to enjoy coastal succulent scrub and coastal sage scrub plants on Sunday, March 1, 8:00-11:00 a.m., with Jim Roberts. See page 3 for details.

### Want to be part of something exciting in San Diego? Sign up to docent the

#### **GARDEN NATIVE TOUR 2015!**

Docents receive complimentary tickets, hands-on training, and garden previews! Contact <a href="mailto:info@gardennative.org">info@gardennative.org</a> or visit <a href="www.gardennative.org">www.gardennative.org</a> for more information.



"I loved the experience of docenting the tour and I am grateful that you extended the invitation."

"I had an absolutely wonderful time both days and all of the guests of the tour and homeowners I talked to were having a great time, too."



Jay Wilson is Executive Director of the Mission Trails Regional Park Foundation. A native San Diegan, Jay spent 10 years in the Marketing Department for Sea World and 5 years as Director of Marketing for the

Zoological Society of San Diego. He enjoys computers, technology, and his grandchildren.

Chapter meetings are free and open to the public. They are held in the Casa del Prado, just west of the San Diego Natural History Museum in Balboa Park.

# Tickets on Sale Now!!! CNPS Garden Native Tour

Saturday & Sunday March 28-29 9:30 a.m. – 4:30 p.m.

Our 2015 tour will feature 16 private and public gardens in the mid-county area, from Poway to Clairemont to our beloved Old Town Native Landscape. Details are available at <a href="https://www.GardenNative.org">www.GardenNative.org</a>.

- \* Visit 19 gorgeous gardens
- \* Adults \$25 each, children free
- \* Sign up for email updates at www.GardenNative.org
- \* Want to volunteer? Contact: info@gardennative.org.

We look forward to seeing you there!!!



Hei-ock Kim

**CNPS Special Projects Coordinator** 

#### **BOARD MEETING**

Wednesday, February 4, 6:30 – 8:30 p.m. 4010 Morena Blvd, Suite 100, San Diego (Thomas Guide 1248 C4). CNPS-SD Executive Board meetings are always the first Wednesday of the month, except when the 1<sup>st</sup> falls on a holiday. Members are welcome to attend as observers. If you wish to discuss an issue, please email president@cnpssd.org to get your issue on the agenda.

#### **ELECTION RESULTS**

In November, six people ran for six positions on the Board and all were elected:

Cindy Burrascano Sue Marchetti
Mike Evans Tom Oberbauer
Mike Gonzales Bobbie Stephenson

At the January Board meeting the officers were elected:

President: David Varner
Vice President: Bobbie Stephenson

Secretary: Mike Evans

Treasurer: Connie di Girolamo

#### **CONGRATULATIONS TO ALL!!!**

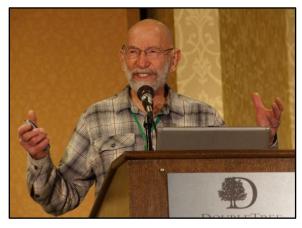
#### **CONSERVATION CONFERENCE**

I know you couldn't all make it to the 2015 Conservation Conference, so I just wanted to give a quick recap: it was a success! Over 1,000 attendees and you should have seen the ballroom filled with people for the banquet! The noise level was astounding. Dr. Peter Raven, Michael Soulé and Jared Farmer were some the main speakers.

From my perspective, Horticulture did a great job - we had three whole tracks and filled the room all day! What fun.

Thanks for all that participated and I hope we can all be at the next one....2018!!!

~ Susan Krzywicki, CNPS Horticulture Program Director



Dr. Michael Soulé's enthusiasm at the conference was inspiring! Photo by Bobbie Stephenson.

#### FIELD TRIPS

**Sunday, March 1, 8:00-11:00 a.m.**, Tecolote Canyon coastal succulent scrub and coastal sage scrub with **Jim Roberts**.

This walk up the less-known and less traveled north side of Tecolote Creek on a steep south-facing slope will spotlight coastal succulent and sage scrub species. Jim Roberts knows where the rare plants are and many should be in full bloom. We will also see oak woodland and native grassland on the flood plain of Tecolote Creek. Meet at Tecolote Canyon Nature Center, at the far east end of the parking lots beyond the east end of Tecolote Road on the east side of I5 just north of I-8. (Sea World Drive meets Tecolote Road on the west side of I-5).

Bring water and sun protection, wear long pants as we will be observing some very thorny plants, and wear good hiking shoes with ribbed soles as we have a short but steep ascent and descent a part of this loop trail. If we have time we will see another nearby part of the hillside that is accessed from a different trailhead about five minutes from the creek.

# THIS YEAR EXPLORE NATURE'S OWN CALIFORNIA NATIVE GARDENS IN THE FIELD!

Start planning now to join fellow plant lovers to see native plants in their native homes. No trips will be more technical than others: while we observe, enjoy, and identify plants on a field trip, you'll hear botanical terms and common names, and you can take in what you want. We also hope to co-ordinate with other organizations whose members would enjoy learning more about our fantastic native flora by joining CNPS members on field trips. CNPS charges no fee to attend; however, national forests and various parks may charge admission fees.

Here is the rough schedule of 2015 CNPS-SD field trips. More may be added. All the trip information will be published in the monthly newsletters in time for you to attend.

**March 1**: Blooming plants of Tecolote Canyon (see above for details.)

**Early March**: See native restoration sites. The March newsletter will have details.

**Mid-March**: Plum Canyon in Anza Borrego Desert State Park, one of CNPSSD members' favorite places in the desert.

Early April: Rattlesnake Canyon, Poway. This could be a banner year for wildflowers!

**Mid-April**: At Iron Mountain between Poway and Ramona we'll see snowberry in bloom.

Third week in April: explore Viejas Peak, Poway, as part of California Native Plant Week.

**Mid-May:** Mountain/transitional flora of upper Mason Valley, with stops along the Sunrise Highway on the way to view other blooming plants of interest.

**Early June**: Cuyamaca Rancho State Park to see azaleas and dogwoods in bloom and to observe reforestation plots.

**Fourth of July camping trip**: To explore the Big Trees in the less-visited southern part of the Sequoia National Forest, at the headwaters of the Tule River. Planning will be done with a CNPS member from San Diego who moved to that area and suggested the idea.

**August:** The PCT (Pacific Crest Trail) near Mount Laguna and Burnt Rancheria Campground, to see monsoonal wildflowers and other late summer flora at the transition zone.

**Late September**: A "drive and walk" field trip on old Hwy 80 from Descanso to past Campo, to identify the many oaks species in San Diego County, with fresh acorns to help ID. The status of other plant life in this season will also be of interest.

**PLUS:** Help us plan a field trip for Easter week, 2016, to camp and explore Colonet Mesa south of Ensenada, BC. Coordinate with the CNPS Baja California Chapter on a three-day weekend, e.g. May 23-24-25, Memorial Day. This may be something to start planning now to do in 2016, because it will require transportation, passports, etc.

If you want to help plan these trips, please join the committee: fieldtrips@cnpssd.org.

~ Kay Stewart, Field Trip Chair

### TECOLOTE CANYON NATURAL PARK



February 1; 8 a.m. to noon. Meet at the Tecolote Nature Center on the first Sunday of the month. Wear sun protection and comfortable walking shoes; bring water. Rain at 8 a.m. cancels. Directions: exit I-5 at Seaworld/Tecolote exit. Go east (away from Mission Bay) on Tecolote, past the ball fields, along the driveway to the very end. Free and open to the public.

#### **N**ATIVE GARDENING

#### **Native Gardening Committee**

The Gardening Committee meets on the 2nd Wednesday of each month. This month the meeting will be on **February 11**. Contact **Sue Marchetti** at NativesforNovices@cnpssd.org for time and location.

#### **Propagation Committee**

The next CNPS-SD Propagation Committee work group meeting will be Tuesday, **February 10 at 10:00 a.m.** at the City Farmer's Nursery. Contact **Jim Wadman** at propagation@cnpssd.org for more information.

#### **Work Parties**

### Zen and the Art of Weeding at the Old Town Native Plant Landscape

Saturday, February 14, Work Party - 1 to 3 p.m. I know, this is a stretch, but here goes: How is weeding like Zen practice? Weeding is focused on weed after weed. Zen focuses on breath after breath. Weeding the Old Town Native Plant Landscape we have to be aware all the time, for a poppy, lupine, chia, milkweed, might suddenly be there in front of your weeding glove and you have to gently work around it then get back to weeding. Zen says be aware of stray thoughts and gently set them aside and get back to the breath. But if this doesn't work for you, you can come and weed for any reason you want! All reasons are accepted!

The Old Town Native Plant Landscape is at the corner of Taylor and Congress Streets. Park in the CalTrans lot across Taylor Street. Bring water, hat, gloves, and your favorite tools, or share ours. Bring some scissors that can get plant juice on them for snipping off weeds around wildflower seedlings. Hope to see you there!

~ Kay Stewart, <a href="mailto:fieldtrips@cnpssd.org">fieldtrips@cnpssd.org</a>

#### **Point Loma Native Plant Garden**

**February 7 & 15, 9:00 a.m. – noon**. Rain cancels; bring water; no facilities; tools/supplies provided. Usually the first Saturday and third Sunday of each month. Contact: Richard@sandiegoriver.org.

## Sunset Cliffs Native Garden Project a Go!

After being in regulatory limbo for 15 months, the Gardening Committee's Sunset Cliffs North Entry Habitat Restoration Project (aka Native Garden) is back on track, with installation scheduled for Sunday, February 15. The garden will show off the beauty of native plants to thousands of residents and tourists who visit the site each year.

Clay Tschudy, in consultation with the Sunset Cliffs Advisory Council (SCAC) and City Parks staffer Michael Ruiz, has designed a garden that meets a complex set of objectives. The Gardening Committee wanted to transform a former dirt parking lot into an attractive, water-wise garden using only local coastal native plants. SCAC and the City wanted to keep areas open for sight-seers and rescue vehicles to access the cliffs, make sure drainage patterns flow away from Sunset Cliffs Blvd., and use low-growing plants to assure passing motorists and pedestrians can view the ocean.

We began planning the project in January 2013, got SCAC approval that June, and were set to submit for our City Parks Right of Entry (ROE) permit in August, when we learned that the project needed to clear the City's Development Services Department [insert ominous music]. They wanted additional studies (plants, birds, vegetation, archaeology, paleontology!) which we completed and returned on November 1. We then waited for Development Services to complete their analysis and give us the go-ahead. Meanwhile, the Propagation Committee was meeting each month to grow plants for the project. As we waited, Lee Gordon perfected the art of germinating and growing bush rue (Cneoridium dumosum). Michael Ruiz was promoted and Vincent Paniagua began dealing with Development Services. As we waited, the plants outgrew their small pots and we began transplanting them to 2- and 3-gallon pots.

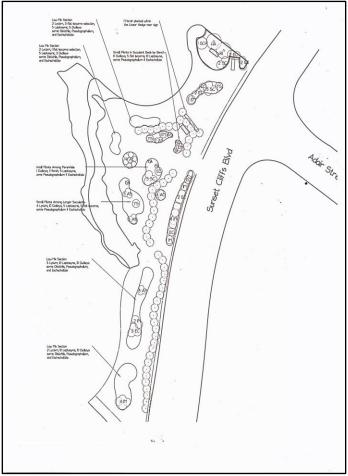
We finally got approval last November and started working on the ROE. As of this writing (January 1), the ROE permit application is ready to submit and all we need is an endorsement from the State CNPS' insurer on the insurance certificate we need to protect the City in case a volunteer gets injured. We are cautiously optimistic that we can surmount the final hurdle by Valentine's Day.

On Saturday, February 14, 9 a.m. - 3 p.m. we will prepare the site, using jack hammers to create the

planting areas. If you are reasonably strong, we need you to come down and help out, even if only for one-half hour. On Sunday, February 15, Clay Tschudy will be giving a talk about the garden design at 10:30 a.m. and planting will take place from 11 a.m. to 3 p.m. Optional beer drinking will take place afterward.

The site is west of the intersection of (1350) Sunset Cliffs Blvd and Adair Street in Point Loma. If you intend to come, please email me at <a href="mailto:flietnerd@gmail.com">flietnerd@gmail.com</a>, so I can let you know should our best-laid plans go awry once more.

~ Dave Flietner



This map gives you a general idea of the layout.



Over 1,000 people attended the CNPS Conservation Conference.

#### **CONSERVATION**

#### **Conservation Committee**

**February 3**. The Conservation Committee meets the first Tuesday of each month. Contact Frank Landis at raresurvey@cnpssd.org for the location.

### Four Dimensional Conservation

Over the weekend, my wife and I took a long walk to look at the road pools on Del Mar Mesa. We were arguing amiably as couples are wont to do, in this case about whether the little brown comma-sized critters we were seeing in the pools were flatworms or leeches. Although I haven't told my wife yet, a bit of googling shows that they are probably flatworms in the genus *Bothriomesostoma*. They seem more plentiful this year, along with filamentous algae in some pools that used to support tadpoles and fairy shrimp. Every year the pools are different, and every year, every pool has something different going on. That's part of what makes vernal pools so much fun to watch.

I volunteer on Del Mar Mesa, which means I look at things, but I don't spend a lot of time studying most of them. Sometimes I think it would be fun to do some sort of simple, multi-year study on the road pools, figure out a way to record how the pools change every year without the project taking over my life. It wouldn't be easy.

That's the fourth dimension of ecology: time, history. I've been around Del Mar Mesa long enough now to see a normally wet year, an epically dry year, and a bunch of other years. Every year, things change, sometimes radically. As time passes, I have sad thoughts about how, if only I'd noted something years ago, perhaps the new thing I'm now seeing would make more sense. But perhaps that's not true. Perhaps I would only end up hoarding data, taking thousands of pictures and data points that never add up to a worthwhile story, just show things changing, in response to when the storms came, whether the storms were followed by heat waves or fog, and the other vagaries of San Diego winter weather.

It's not just a matter of collecting data, it's a matter of simplifying it, figuring out whether there's a real pattern, or whether it's just random events and the perennial human desire to see patterns within them. That's a perennial issue in ecology, which as a science has a lot of random noise and some very slow trends. I do know enough to know that recording the changes in vernal

pools would not be an easy study, especially if I was trying to do it on a shoestring.

It's a perennial problem in all sciences. Reality is four dimensional. When we try to study it or even protect it, we inevitably try to simplify it into two dimensions, whether those dimensions are notes on a page, words in a study, or regulations. Just as a portrait of a person rarely captures their history or even how they look in three dimensions, simplifying reality to paper and computer file inevitably distorts things.

This isn't to say simplification is always bad. Far from it. After all, I was able to look up that flatworm on the internet, because Google has taken the time to figure out how to simplify information into a set of common protocols, and because someone uploaded the relevant papers and made them searchable.

Still, when it comes to conserving things as time dependent as vernal pools, we're over-simplifying things a bit too much, at least in my opinion. Pools change every year, and it seems to be tricky to formulate a set of rules that make sense. One thing that changes is where the pools are.

For those who don't know, there are vernal pools and road pools, at least according to the regulators. Vernal pools are special wild pools that must be (theoretically) protected if they contain sensitive species. Road pools happen when someone creates a trail of some sort through a vernal pool area and creates a rut (deliberately or unintentionally), thereby compacting the soil underneath the rut. Said compacted rut can fill up with water and hold vernal pool plants and animals, including sensitive species. Unfortunately, regulators shy away from protecting ruts, even though, in drier years, they are generally the only places where vernal pool plants and animals actually live. Right now, on Del Mar Mesa, I know of only two wild pools that have any water in them. In contrast, there are a bunch of road pools with over a foot of water in them, and most of them have spadefoot tadpoles and fairy shrimp doing their annual race to finish their aquatic lives before the ruts go dry. Trouble is, road pools aren't protected. Vernal pools are. I don't know how an agency tasked with protecting sensitive species can ignore the habitat where sensitive species actually live every year, but the City of San Diego has been silent every time I've pointed this out to them.

Hopefully the City's silence means that they are working on a really clever set of regulations that will cover all the vernal pools, in the road and elsewhere. We'll see. Conserving things in all four dimensions is hard.

~ Frank Landis, Conservation Chair

#### RELATED ACTIVITIES

#### **Anza-Borrego Botany Society**

February 9, 10:00 a.m. Anza-Borrego Desert State Park Visitor Center, 200 Palm Canyon Drive, Borrego Springs. The public is invited; FREE. Evan MacKinnon, a plant ecologist with a background in research, will reveal why the aggressive non-native grass Red Brome is a significant threat to Southern California in his talk about "Red Brome Physiology and Management." As an environmental scientist with Colorado Desert District that includes Anza-Borrego Desert State Park, Evan joined the park staff last May and plans to use his research experience as a weapon against such threats.

# San Diego Mycological Society SAN DIEGO FUNGUS & WILD MUSHROOM FAIR

February 15, Sunday, 10:30 am – 3:30 pm. Casa del Prado, Room 101. Free (donations greatly appreciated).

- Locally collected native wild mushrooms & fungi on display.
- Learn about the fungi of local San Diego areas from our mountains, deserts & around the city!
- Fair vendors: fresh wild mushrooms, cultivation kits, books, clothing, posters, & other mushroom-centric items.
- BYOM (Bring Your Own Mushroom) to have identified.
- Slide shows and Lectures.
- Food available for purchase.
- Mushroom growing demonstrations.
- A chance to join your local mycological society!

In addition to the show, enjoy these Speakers:

11:00 a.m. Casa del Prado Room 104: Lucy Warren & Greg Rubin - topic: mycorrhizal fungi. Lucy and Greg are the authors of The California Native Landscape: The Homeowner's Design Guide to Restoring Its Beauty and Balance

**12:00 noon.** Casa del Prado Room 104: Mycologist and FUNGI Magazine editor, Britt Bunyard.

**1:00 p.m.** Patio area (between Rooms 101 and 104) Grow your own edible mushrooms demo / Cultivation - Sam Andrasko, Former President of San Diego Mycological Society.

**2:00 p.m.** Room 104: Elio Schaechter, author of <u>In the Company of Mushrooms: A Biologist's Tale</u> (Hardcover, April 15, 1997).

http://schaechter.asmblog.org/

Alissa Allen has been experimenting with mushroom derived pigments and sharing her enthusiasm and experience with others for over 15 years. http://mycopigments.com/alissa-allen/

To join the San Diego Mycological Society visit <a href="http://sdmyco.org">http://sdmyco.org</a> .



#### **Anstine-Audubon Nature Preserve**

Free Workshop: How to Propagate California Native Plants

**Saturday, February 28.** Certified Master Gardener and CNPS member **Anne Murphy** will lead a free, hands-on workshop, "How to Propagate California Native Plants at the Anstine-Audubon Nature Preserve, 2437 Hutchison St. in Vista.

Using cuttings from salvias and other native plants at the preserve, the workshop will cover step by step how to prepare pots and potting soil, take a cutting from a parent plant, pot and care for a cutting and what to do after your new plant "takes."

Participants will leave with cuttings, a "plant-to-be" to take home, and seeds from California native plants. There will also be time after the class to chat, mingle with fellow gardeners and walk the trails of this beautiful preserve.

Space is limited, so pre-register to reserve your spot at www.anstine.eventbrite.com.



Arne Johanson giving his 5-minute "lightening talk" about habitat restoration at the Conservation Conference in January. Photo by Bobbie Stephenson.

Dr. Peter Raven speaking on the last day of the Conservation Conference. Photo by Bobbie Stephenson.



The CNPS-SD Newsletter is generally published 12 times a year. The newsletter is not peer reviewed and any opinions expressed are those of the author identified at the end of each notice or article. The newsletter editor may edit the submittal to improve accuracy, improve readability, shorten articles to fit the space, and reduce the potential for legal challenges against CNPS. If an article, as edited, is not satisfactory to the author, the author can appeal to the board. The author has the final say on whether the article, as edited, is printed in the newsletter. Submissions are due by the 10<sup>th</sup> of the month preceding the newsletter; that is, March 10 for the April newsletter, etc. Please send submittals to newsletter@cnpssd.org.

### CNPS-SD Calendar for January 2015

2/1: Tecolote Canyon Walk, p. 4

2/3: Conservation Committee Mtg, p. 5

2/4: **Board Meeting**, p. 2

2/7: Point Loma Native Garden Work Party, p.42/10 Propagation Committee Work Party, p.2

2/11: Gardening Committee Mtg, p. 4

2/14: Old Town Native Landscape Work Party, p.4 2/14-15: Sunset Cliffs Native Garden Installation, p.4

2/14: Point Loma Native Garden Work Party, p.4

2/17: Chapter Meeting, p. 1

3/1: Field Trip, Tecolote Cyn north side, p. 3

MEMBERSHIP APPLICATION			
Student or Limited Income \$25;Individual \$45;Family \$75			
Plant Lover \$100;Patron \$300;Benefactor \$600;Mariposa Lily \$1,500			
Name(s):			
Address:			
Phone: e-mail:			
Mail check payable to "CNPS" and send to: CNPS, 2707 K Street, Ste 1, Sacramento, CA 95816-5113.			

#### CALIFORNIA NATIVE PLANT SOCIETY

San Diego Chapter C/o San Diego Natural History Museum P. O. Box 121390 San Diego, CA 92112-1390 Nonprofit Organization
U.S. Postage
PAID
PERMIT NO. 1522
San Diego, California



January 2015 Newsletter

#### Dedicated to the preservation of the California native flora

#### CALIFORNIA NATIVE PLANT SOCIETY - SAN DIEGO

www.cnpssd.org

info@cnpssd.org

WEBSITE: Mary Alice Kessler.....webmaster@cnpssd.org

BOARD MEMBERS	APPOINTED COMMITTEE CHAIRPERSONS
PRESIDENT: David Varnerpresident@cnpssd.org	CONSERVATION: Frank Landisconservation@cnpssd.org
(619) 316-0499	(310) 883-8569
VICE PRES: Bobbie Stephensonvicepresident@cnpssd.org	FIELD TRIPS (EASY): Paul Hormickfieldtrips@cnpssd.org
(619) 269-0055	HOSPITALITY: Betsy Coryhospitality@cnpssd.org
SECRETARY: Michael Evanssecretary@cnpssd.org	(619) 656-8669
TREASURER: Connie di Girolamotreasurer@cnpssd.org	INVASIVE PLANTS: Arne Johansoninvasiveplants@cnpssd.org
BOOK SALES: Cindy Burrascanobooksales@cnpssd.org	(858) 759-4769
(858) 578-8040	LIBRARIAN: Pat Fishteinpfishtein@cox.net
FIELD TRIPS: Kay Stewartfieldtrips@cnpssd.org	MEMBERSHIP: Connie di Girolamomembership@cnpssd.org
(619) 234-2668	NATIVES FOR NOVICES: Sue Marchetti
NATIVE GARDENING: Sue Marchettigardening@cnpssd.org	nativesfornovices@cnpssd.org
PROGRAMS: Mike Gonzalesprograms@cnpssd.org	NEWSLETTER: Bobbie Stephensonnewsletter@cnpssd.org
RARE PLANT SURVEYS: Frank Landisraresurvey@cnpssd.org	(619) 269-0055
(310) 883-8569	PLANT PROPAGATION: Jim Wadmanpropagation@cnpssd.org
BOARD MEMBER: Tom Oberbauer	619-294-7556
BOARD MEMBER: Clayton Tschudy	OLD TOWN NATIVE PLANT GARDEN:
	Peter St. ClairOldTownLandscape@cnpssd.org
CHAPTER COUNCIL DELEGATE: Dave Varner	PLANT SALE-FALL: Carolyn Martusplantsale@cnpssd.org
(619) 316-0499chaptercouncil@cnpssd.org	PLANT SALE-SPR: OPENspringplantsale@cnpssd.org
DADE DI ANT DOTANIOT	POSTER SALES: OPENpostersales@cnpssd.org
RARE PLANT BOTANIST	PUBLICITY: Pat Fishteinpublicity@cnpssd.org
Fred Robertsrarebotanist@cnpssd.org	(619) 280-8234
(760) 439-6244	PUBLIC OUTREACH: Betsy Corypublicoutreach@cnpssd.org
GARDEN NATIVE (Native Garden Tour)	VEGETATION: Anna Bennettvegetation@cnpssd.org
Hei-ock Kimdirector@gardennative.org	and Kayo Valentivegetation@cnpssd.org
· · · · · · · · · · · · · · · · · · ·	MEDCITE Many Alice Manular webmoster@anneed are