

# CALIFORNIA NATIVE PLANT SOCIETY San Diego Chapter Newsletter

### **CHAPTER MEETING**

Tuesday, September 16; 7 p.m. Room 101, Casa del Prado Balboa Park

SPECIAL EVENT
Two Presentations in One Evening

#### Celebrating 50 Years of Wilderness -Affected Primarily by the Forces of Nature



The historic and inspiration Wilderness Act was signed on September 3, 1964. Fifty years later, it endures and still inspires. Please join CNPS, Anne Fege and many others this evening in celebrating the history and now the vastness of the Wilderness Preservation System, 109 million acres in 44 states. Locally, Agua Tibia Wilderness was established in 1975; Hauser, Pine Creek and San Mateo Canyon wildernesses followed in 1984; and others in the 1994 California Desert Protection Act.

The Wilderness Act states that "A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammeled by man, where man himself is a visitor who does not remain.... [These areas are] affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." For San

Diegans, this means that we are within an hour drive of wilderness areas that have quiet, dark sky, wind, weather, and native plants.

The Wilderness Act provides for areas with "outstanding opportunities for solitude or a primitive and unconfined type of recreation... [and have] ecological, geological, or other features of scientific, educational, scenic, or historical value." Native plants have a special place and protection in wilderness. Our legacy will be to keep these wilderness areas affected primarily by the forces of nature, to use and enjoy wilderness, to restrict human imprints, and help secure the enduring resource of wilderness.

### California Native Landscaping Protocols

In this presentation Greg will be outlining the specific ways in which California native landscape protocols differ from an ornamental horticultural approach, and the justifications for each. This is the result of Greg's nearly 30 years of practical experience in hundreds of different situations throughout Southern California. Topics will include commercial growing, site preparation, plant selection, planting season, planting techniques, irrigation, and maintenance. Greg will also discuss some of the controversies surrounding the use of these different approaches, and the impact this has had on the growth of the industry.

**6:30 p.m. – Natives for Novices:** "Preparing for the Plant Sale - How Not to Trip Yourself Up!" Presenter Sue Marchetti

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

7:30 p.m. - presentation.

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.

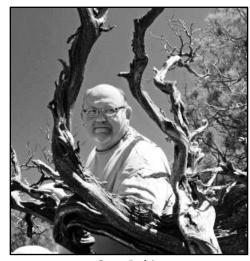
#### TIME TO START PLANNING FOR FALL GARDENING!



Fuchsia-flowered gooseberry (*Ribes speciosum*). Photo by Jude Parkinson-Morgan (used with permission from Bay-Friendly Landscaping & Gardening website).

Anne S. Fege, Ph.D., is a CNPS member; retired Forest Supervisor, Cleveland National Forest (1991-2004) and National Wilderness Program Manager, Forest Service (1988 to 1991); and is currently Chair of the Community Forest Advisory Board, City of San Diego, and Program Manager of the San Diego Children and Nature Collaborative (part of the San Diego Science Alliance).

**Greg Rubin** is a native landscape design/build contractor who has worked on over 700 native landscapes in southern California. Greg is a popular lecturer, has written numerous articles on native landscaping, has been featured in a number of periodicals, and coauthored the book "The California Native Landscape" with Lucy Warren, published by Timber Press.



**Greg Rubin** 

### PREZ SEZ

Hello everyone. Our annual Native Plant Sale is fast approaching. This is a very important event for our chapter. First, it is one of the key ways that we are able to provide native plants to the public. This is especially important this year with the continuing drought. As you know it has been more publicized recently that the use of drought tolerant native species can reduce the consumption of imported water which itself is becoming less available due to the limited snowpack in the Sierras and mountains throughout the southwest. It is also a means to showcase the beauty and uniqueness of our native plants in horticulture.

Second, it is the major fundraiser for our organization each year. We depend on the income from the plant sale to carry our organization through the year and allow us to carry out projects regarding conservation, rare plants, education and providing support for other organizations and worthy causes. So, please consider attending the sale and purchasing some plants.

Third, it is a social event that creates the opportunity for a large level of interaction with fellow native plant lovers. I am sure that you will see people that you have not seen for a year. You can obtain advice about how to care for your native plants, and you can marvel at the native plants that are available in this region. Even if you think that you have no space or room for native plants, I am sure that if you came by, you will see something that will fit into your garden.

Finally, it is a culmination of a yearlong effort for our chapter. There are endeavors for plant propagation, acquisition of plants, coordination of volunteers and coordination of moving the plants to the sale that are herculean under the leadership of our plant sale committee. The Fall Native Plant Sale is the largest event that our chapter holds each year.

In order to whet your appetite and get you in the mood for native plants, our September meeting program is focusing on Native Plants for landscaping with Greg Rubin coauthor of *The California Landscape: The Homeowner's Design Guide to Restoring Its Beauty and Balance* as the key speaker.

One other thing that I wanted to mention is the main way that we can save expenses to the chapter, and that is by choosing to receive your monthly newsletter electronically. The greatest cost that we have each year is the cost of sending a paper newsletter. There are benefits in receiving it electronically. You receive it at

the time that it is published and you do not need to wait until it is delivered by hand. Most importantly, it is in color. The version that is mailed on paper is only printed in black and white. You will be able to see the photographs of unique plants, locations, and gardens in brilliant color so that their true beauty shows through. So please, if you would like, let us know by E mail or by filling out a form at one of the meetings or the plant sale that you would like to receive your newsletter electronically.

Thanks again and please attend the plant sale on October 18 in the Casa Del Prado Courtyard of scenic Balboa Park.

~ Tom Oberbauer, President

### **BOARD MEETING**

Wednesday, September 3, 6:00 – 9:00 p.m. at the Cuyamaca College Water Conservation Demonstration Garden at 12122 Cuyamaca College Drive West, El Cajon, CA 92019. Committee Chairs are encouraged to attend this meeting to discuss your committee's goals and vision.

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 <a href="mailto:president@cnpssd.org">president@cnpssd.org</a> to get your issue on the agenda.

### **INVASIVE PLANTS**

Our Invasive Weed group is a hands-on working & training group that meets six days a week during the wet season (generally December through May). During the dry season we work more like once or twice a week concentrating on perennial weeds. That is not to say that everyone comes every day. Each individual comes as it fits their schedule. Most come once a week, some once every other week and others twice a week or more. Typically, I schedule all interested people on Sundays for the following week matching restoration needs with individual abilities. Any interested people should contact Arne Johanson at 858-759-4769 or invasiveplants@cnpssd.org.

### FALL PLANT SALE

Saturday, October 18 10:00 – 11:00 a.m. CNPS Members Only 11:00 a.m. - 3:00 p.m. Everyone

#### **Casa Del Prado Courtyard**

(across from the west entrance to the Natural History Museum)

#### Balboa Park

Preordering for the plant sale will be available only for CNPS members from Sept. 1 – Sept. 15. Minimums: 20 items or \$100. Details will be announced on the Chapter website and listserve.

#### PREORDER SPECIALS!

Thanks to Moosa Creek Nursery

(www.moosacreeknursery.com)

Bush Monkeyflower 1-gallon /
(Mimulus aurantiacus) just \$4.00 each
Ladyfingers 4-inch pots /
(Dudleya edulis) just \$2.00 each

#### **Thanks to Recon Native Plants**

(www.reconnativeplants.com):

Cane Bluestem 1-gallon /

(Bothriocloa barbinodis) just \$1.00 each

Cane bluestem is a perennial drought tolerant grass about 1-2 feet in height. Birds flock to the fluffy seed heads to feast and it looks best when planted in mass. Great for slopes or in meadow plantings! It is often dismissed by most gardeners, but it truly deserves more recognition in the landscape. After flowering, it should be weed whipped down to the ground.

#### **VOLUNTEER FOR THE SALE**

The plant sale committee is looking for volunteers to help with this year's sale.

• Seed Team: Help clean and package seeds

- Publicity: help distribute flyers, simply download one from our website and post it in a public place.
- Volunteer the day before the sale: We need lots of helpers the Friday before the sale from 9 a.m. to noon to help set up the sale.
- **Volunteer the day of the sale:** We need lots of helpers on the day of the sale from 8 am to 4pm.
- Before the sale: We need a few volunteers the Wednesday or Thursday to help tag plants, at nurseries in San Diego County about 4 hours of your time.

For more information: info@cnpssd.org

### **CONSERVATION**

### **Mosaic World**

This essay was inspired by a radio interview I heard, months ago on public radio, driving back to San Diego one night. The show was Krista Tippett's *On Being*, and she was interviewing the conservationist and writer Terry Tempest Williams on the subject of mosaics.

I'm not really a fan of mosaics as art (and my apologies to those who are), but I was struck by Ms. Williams use of the art form as a metaphor for healing. As with all art, mosaics are built by breaking something to make something new, but the Italian mosaicists who taught Ms. Williams made this process more explicit than it is in other art forms. The point of the mosaic metaphor isn't that things become broken and then heal back into their old form, it's that they are broken and healed into something new and different, just as a mosaic is a whole composed of broken pieces. It's a useful metaphor that Williams extends to conservation, but I suspect it goes so much further than that. It's not just about conservation and wild areas, it's also about developments and cities, even the weather.

Perhaps I'm drawn to the mosaic metaphor because so many old development plans seem to be coming back to life right now. The development on Del Mar Mesa is back again, after it was approved but not built in 1997, after it was approved but not built in 2001, after it was first planned for in 1991, and probably after it was part of some general plan dating back to I-don't-know-when. Camino Del Sur used to be part of Camino Ruiz, reaching north from Miramar as far as the original city planners could see. Then Los Peñasquitos Preserve broke Camino Ruiz, which was supposed to bridge Los Peñasquitos Canyon much the way the Regents' Road bridge was supposed to bridge Rose Canyon. They called the

northern fragment Camino Del Sur.

There's a little four-lane piece of Camino Del Sur on the north side of Los Penasquitos, waiting for that last mile across Del Mar Mesa to connect up to the rest of its length. That road probably doesn't need to be four lanes—there's not enough traffic to require it—but it's a broken part of the old road plan, and they're still working on it, trying to make some four-lane whole out of the broken pieces of the old plan.

Del Mar Mesa has all these pieces of old plans and old plants, of Camino Ruiz, the developments of the 1990s and 2000s, of the preservationists of the 1990s, of the dreams of landowners who bought in the 1960s and want to cash out now, somehow, All of these are going to break, but what new whole will come from the pieces? We'll see.

There are projects like that going on all over the County right now. I've got another supplemental EIR sitting on my table, from a project in 2010, that broke over some detail and is getting remade now.

Then there are the wildlands. As they get broken into smaller and smaller fragments, as the critical connections between them become more tenuous, they become more valuable too. We're starting to realize now that all these preserves are recreation magnets for runners and cyclists, and the plan to leave them set aside as untouched pocket wildernesses is breaking too.

That's the problem with long-term plans. Reality seems to break them, even as people struggle throughout their entire careers to see them through. Then people work to heal them, create something new from what survives.

We're also realizing that our long-term conservation plans may break due to climate change. Our conservation plans, with their connectivity patterns and richness studies and core habitats surrounded by development, now these all have to contend with a climate that's changing all the habitat parameters. Will the migration corridors work, or will they break? What will remain in the areas we set aside?

But developments plans are breaking under climate change too. While the Peak Oil advocates seem to have been wrong and we're not going to run out of oil this decade, even the International Monetary Fund, that (ahem) bastion of liberal zaniness that it is, is forecasting that gas prices will double in the next 10 years and never go down again. Even the auto industry is saying that shared cars like Car2Go are the next big area for new product development. Even the electrical utilities are deeply afraid that rooftop solar will leave them stuck with maintaining a grid that no one particularly wants,

except for emergencies. Old patterns are breaking all over.

And how is Del Mar Mesa going to accommodate all of these changes? It's a yet-to-be-built relic of 1980s suburbia, with no provision for public transport, let alone Car2Go parking lots and local storage for solar electricity. Which part of it will break first? Will people even want to live there, if they can't afford to commute to work? Are people going to work at home, or are they going to buy smaller houses closer to their jobs? We'll find out.

Cities really are mosaics. They are the surviving pieces of old plans reshaped and repurposed to make something new, only to be broken and reshaped again, and again, and again. They are a processes as much as places.

Even the weather is a mosaic. I'll ask you to cast your mind back to the steamy days of early August, 2014, when we were, ahem, blessed by the summer monsoon with a couple days of light rains and lightning, along with Midwestern-style heat and humidity.

As I understand it, this is the kind of weather that we may see more of with climate change. Right now, these events are rare, but as the climate warms, we may (and note the may) see more summer monsoon showers, fewer big winter storms. In other words, our climate will be more like Baja, where the rains are unpredictable, falling any time of year. If climate change gets really bad, we may switch to a summer rainy season driven by tropical storms that are fed off of a much warmer ocean, but that won't be for a century or more

The weather is another mosaic, highs and lows, heat waves and frosts, Santa Anas and storms, droughts and floods. The climate of the future is already here, but it's here in pieces, very unevenly distributed. We don't even know which of those pieces will become more common until they become normal, which will become less common until they disappear from our lives. That's how the weather changes, not by a gradual wave of change, but in the unevenly distributed events that generate those averages.

The future is arriving, one broken piece at a time. Although I don't want to extend this metaphor much further, I'd suggest that our jobs as conservationists are to heal all the pieces into some new whole, over and over and over again. As metaphors go, there are worse ones. While it's a tedious vision of eternal work, I suspect it's a bit better than struggling against pitiless entropy to preserve some fragment of a mostly-vanished past.

~ Frank Landis, Conservation Chair

# TAXONOMY Relation or Convergence?

Any systematic treatment is supposed to reflect true relationships – you don't want to lump things together just because of superficial similarities. Species such as our familiar Ghost Flower (*Mohavea confertiflora*) and its look-alike Sand Blazing Star (*Mentzelia involucrata*) are not only in different genera, but even in different families (Plantaginaceae resp. Loasaceae). And the succulent aficionados amongst you know that at first glance some asclepiads and euphorbs can easily be mistaken for cacti. This striking similarity between unrelated plants is due to convergence: although having begun at different starting points, their evolution has converged to lead to similar results.

The same is true in the animal kingdom. Amongst butterflies for instance, Monarchs and Viceroys or Lorquin's Admirals and California Sisters are hard to distinguish when they flutter by. Take this one step further and you'll find insects that look like plants (think certain katydids or Walking Sticks) and fish that when not in motion closely resemble rocks. Plants, by the way, can retaliate: there are orchids (*Ophrys* spp.) with flowers that exude compounds chemically akin to female pheromones of various bee species and with lips that feel like those bee females to males landing on them and attempting copulation.

The reasons behind many of these similarities are quite obvious. Succulent asclepiads, euphorbs and cacti share the same harsh desert environment, where they need to reduce leaves to minimize water loss and want spines to protect against browsing animals. Viceroys benefit from their similarity to Monarchs, since the latter are avoided by insectivorous birds due to their bitter milkweed taste, and plant-like insects are camouflaged to hide from predators (feathered or scaled). Such imitation of one species by an unrelated other is called mimicry, a natural selection-driven special case of convergence. And rocklike fish don't want to be noticed to surprise unsuspecting prey, while those duplicitous orchids of course try to attract pollinators.

All these tricks cannot deceive the taxonomist, however. He or she can look beyond superficial morphology and analyze anatomical details (if necessary, all the way down to electron microscopic levels), revealing the true similarities or differences between organisms. On this

basis, genera have been lumped or split or been moved to other families – sometimes prematurely, resulting in subsequent modifications or even reversals.

Systematic and taxonomic rearrangements really took off when an even better tool became routinely available - the sequencing of DNA, which is expected to give the ultimate answer to the question who is related to whom, and who is not. Unfortunately, things are not quite as straight-forward as they seem to be. Sequencing the whole genome of many organisms is impracticable (too time-consuming and expensive), so representative gene clusters have to be selected, which may or not be the optimal choices. Nuclear DNA is prone recombinatorial events, which may confuse the picture, plasmid DNA (that of chloroplasts or other organelles) can mutate and only reflects the maternal heritage. So even DNA analysis does not always lead to unambiguous and the systematic consequences sometimes be more confusing than elucidating. Take of our well-known families for Boraginaceae and Hydrophyllaceae, both in the Order Solanales. That was then, until taxonomists with their ever improving tool kit decided that they were indeed closely related but different from other families in Solanales, so maybe they should constitute a separate order, Boraginales. Not really, was the next step. First of all, they should not be separate families (so let's get rid of Hydrophyllaceae and call everybody Boraginaceae), and by the way, we don't think they are Solanales. Bottom line after all this progress is one larger family (Boraginaceae) instead of two smaller ones, floating in taxonomic no-man's-land, i.e. not assigned to any order - not really the improved understanding of true relationships scientists had hoped for.

Rather than dwelling on small uncertainties, however, let's get back to what has fairly recently been clarified and led to the break-up of those heterogeneous Scrophulariaceae. You remember: 5 stamina, 4 usually didynamous (2 long, 2 short) ones, only 2 stamina total, and many other anatomical inconsistencies. Now we know that most of ours are in fact Plantaginaceae, which finally takes me back to my initial question: related or convergent? What would a common ancestor of humble plantain species like Plantago major and spectacular Penstemons have looked like? And what could have caused it to evolve into such widely different species that the conspicuous and colorful ones were able to deceive taxonomists for centuries to call them Scrophulariaceae?

Was there a strong selective pressure on some of the descendants (but not all) to develop beautiful flowers to

attract pollinators, making them the advanced ones and the simple ones the primitive? Or did the ancestor already have attractive flowers, which some of the descendants found they did not need, making them the advanced ones and their colorful brethren the primitive? Or was the whole chain of events simply due to genetic drift, i.e. populations with different gene pools got separated and went their own ways? Many other explanations are possible – transposons like plasmids or viruses could have transferred genetic material from unrelated species, epigenetic effects could have been inherited, and so on.

There is one far-out other hypothesis that could be called the ultimate heresy; the DNA sequence of certain well-studied but in the overall context not very relevant gene clusters could have converged, e.g. through one of the mechanisms mentioned above, thus obscuring the true relationships reflected in the plants' morphology and anatomy. Statistically unlikely, but keep in mind that flowering plants have evolved over more than 100 million years, with the corresponding number of generations. Heresy, since this would make DNA sequencing not the magic bullet that beats all other disciplines (morphology, anatomy, physiology, biochemistry, developmental biology, etc.), but only one very powerful tool in the arsenal, the results of which should be carefully weighed against other evidence.

You may have noticed, dear reader, that this little article went from well-established facts to wild speculations, which are admittedly highly unscientific but occasionally fun. Will we ever know the answers to the various questions it asks? I have no doubts considering the progress taxonomy has made since Linnaeus first formulated binomial nomenclature, but you and I may not live long enough to find out whether *Mimulus* is indeed a Phrymaceae (our grandchildren will). So let's go with the ancient Greek philosopher Heraclitus ("Panta rhei" – everything flows), stay tuned and enjoy the ride.

~ Jürgen Schrenk, Member

### **WORK PARTIES**

#### **Old Town Native Plant Landscape**

Saturday, September 13 - Work Party - 1 to 3 p.m.

Come help other volunteers tend the Old Town Native Plant Landscape. Bring sun protection, gloves, drinking water, and your favorite tools, or share ours. The landscape is opposite the Old Town Trolley/Train depot, corner of Congress and Taylor Streets near the I-5/I-8

interchange. If you drive, you can park for free in the shade of a tree in the Cal-Trans lot across Taylor Street from the native plant landscape. Questions? Contact Kay at fieldtrips@cnpssd.org.

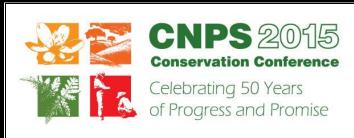
#### **Point Loma Native Plant Garden**

**September 6 & 21, 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

### TECOLOTE CANYON NATURAL PARK



September 7; 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 the walk. 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, and parking is also free.



#### **Event Dates**

Jan 13-14 - Preconference workshops and field trips

Jan 15-17 - Scientific conference

#### **Conference Venue**

DoubleTree by Hilton, San Jose 2050 Gateway Place, San Jose, CA 95110

Registration is open!

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.

### RELATED ACTIVITIES

#### **Coastal Clean-up Day**

Location: Santee's Town Center Community Center

550 Park Center Drive, San Diego CA 92071

Date: Sep 20, 2014, 9 a.m. - noon

Admission: Free

Website: <a href="mailto:cleanupday.org">cleanupday.org</a>
Phone number: 619-297-7380
Email: <a href="mailto:volunteer@sandiegoriver.org">volunteer@sandiegoriver.org</a>

For more info visit:

http://www.volunteermatch.org/search/opp1739684.jsp

### 2014 Cal-IPC Symposium "Wildland Weeds & Water"

Oct. 8-11, 2014 - CSU Chico

Registration is open for this annual symposium, which features presentations and discussion groups on the latest information in land management in these times of drought. <a href="http://www.cal-ipc.org/symposia/index.php">http://www.cal-ipc.org/symposia/index.php</a> for more info.

## 40th Annual SCB Symposium "Southern California Plant Communities: Threats and Solutions"

Saturday, Nov. 1, 2014 - Pomona College

Southern California Botanists (SCB) will host this year's symposium at the North Seaver Auditorium at Pomona College from 9:00 a.m. to 5:00 p.m. A mixer and banquet will follow at Rancho Santa Ana Botanic Garden, Claremont, CA. The mixer will feature the musical duo of Antonio Sanchez (RSABG Nursery Production Manager) and Evan Meyer (RSABG Seed Conservation Program manager), aka Sage Against the Machine, and their California native plant Visit songs. http://www.socalbot.org/symposia.php for more information and registration.

### CNPS-SD Calendar for September 2014

9/3: **Board Meeting**, p. 3

9/6: Point Loma Native Garden Work Party, p.7

9/7: Tecolote Canyon Walk, p. 7

9/13: Old Town Native Landscape Work Party, p.7

9/16: Chapter Meeting, p. 1

9/21: Point Loma Native Garden Work Party, p.7

		MEMBERSHIP APPLICATION	
	Stı	udent or Limited Income \$25;Individual \$45;Family or Libr	ary \$75
	Plant	Lover \$100;Patron \$300;Benefactor \$600;Mariposa L	ily \$1,500
	Name(s):		
	Address:		<del></del>
Phone:		e-mail:	_ Mail check payable to
		"CNPS" to: CNPS, 2707 K Street, Ste 1, Sacramento, CA 95816.	

#### 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



September 2014 Newsletter

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

#### CALIFORNIA NATIVE PLANT SOCIETY - SAN DIEGO

www.cnpssd.org

info@cnpssd.org

# (858) 578-8040

**BOARD MEMBERS** 

PRESIDENT: Tom Oberbauer.....president@cnpssd.org VICE PRESIDENT: Jonathan Dunn....vicepresident@cnpssd.org SECRETARY: Michael Evans.....secretary@cnpssd.org TREASURER: Connie di Girolamo ......treasurer@cnpssd.org BOOK SALES: Cindy Burrascano.....booksales@cnpssd.org

FIELD TRIPS (ADVANCED): Kay Stewart...fieldtrips@cnpssd.org (619) 234-2668

NATIVE GARDENING: Clayton Tschudy..gardening@cnpssd.org NEWSLETTER: Bobbie Stephenson.....newsletter@cnpssd.org (619) 269-0055

RARE PLANT SURVEYS: Frank Landis...raresurvey@cnpssd.org (310) 883-8569

NATIVES FOR NOVICES: Sue Marchetti.....

nativesfornovices@cnpssd.org

CHAPTER COUNCIL DELEGATE: Dave Varner..... (619) 316-0499......chaptercouncil@cnpssd.org

**RARE PLANT BOTANIST** 

Fred Roberts.....rarebotanist@cnpssd.org (760) 439-6244

**GARDEN NATIVE (Native Garden Tour)** 

Hei-ock Kim ......director@gardennative.org

#### APPOINTED COMMITTEE CHAIRPERSONS CONSERVATION: Frank Landis.......conser

(310) 883-8569
FIELD TRIPS (EASY): Paul Hormickfieldtrips@cnpssd.org
HOSPITALITY: Betsy Coryhospitality@cnpssd.org (619) 656-8669
INVASIVE PLANTS: Arne Johansoninvasiveplants@cnpssd.org (858) 759-4769
LIBRARIAN: Pat Fishteinpfishtein@cox.net
MEMBERSHIP: Will Johnsonmembership@cnpssd.org
PLANT PROPAGATION: Jim Wadmanpropagation@cnpssd.org
619-294-7556
OLD TOWN NATIVE PLANT GARDEN:
Peter St. ClairOldTownLandscape@cnpssd.org
PLANT SALE-FALL: Carolyn Martusplantsale@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org PUBLICITY: Pat Fishteinpublicity@cnpssd.org (619) 280-8234
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org PUBLICITY: Pat Fishteinpublicity@cnpssd.org (619) 280-8234 PUBLIC OUTREACH: Betsy Corypublicoutreach@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org PUBLICITY: Pat Fishteinpublicity@cnpssd.org (619) 280-8234 PUBLIC OUTREACH: Betsy Corypublicoutreach@cnpssd.org VEGETATION: Anna Bennettvegetation@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org PUBLICITY: Pat Fishteinpublicity@cnpssd.org (619) 280-8234 PUBLIC OUTREACH: Betsy Corypublicoutreach@cnpssd.org VEGETATION: Anna Bennettvegetation@cnpssd.org and Kayo Valentivegetation@cnpssd.org
PLANT SALE-SPR: Kristen Olafsonspringplantsale@cnpssd.org POSTER SALES: OPENpostersales@cnpssd.org PROGRAMS: Mike Gonzalesprograms@cnpssd.org PUBLICITY: Pat Fishteinpublicity@cnpssd.org (619) 280-8234 PUBLIC OUTREACH: Betsy Corypublicoutreach@cnpssd.org VEGETATION: Anna Bennettvegetation@cnpssd.org