



CALIFORNIA NATIVE PLANT SOCIETY
San Diego Chapter Newsletter

CHAPTER MEETING

Tuesday, January 17; 7 p.m.
Room 104, Casa del Prado
Balboa Park

San Diego Canyonlands – Current and Future Activities

Eric Bowlby, Executive Director of San Diego Canyonlands, (SDCL), will make a presentation focusing on two main topics. The first is SDCL's proposal to dedicate approximately 10,000 acres of city-owned land for permanent open space and parkland. His second topic will be about aspects of their Canyon Enhancement Planning (CEP) Committee, created in 2009, as a guide for community stakeholders that facilitates a systems approach for integrating our natural open spaces with the fabric of the urban environment. These aspects include visual and physical canyon access, restoration, preservation, environment-based education and ecologically sensitive recreation. The pilot for the program is Manzanita Canyon in City Heights and the on-the-ground benefits are already materializing.

6:30 p.m. Natives for Novices – Fact Sheets for Natives by Susan Kryzwicki.

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

7:30 p.m. – presentation



Example - Trail to Azalea Park



One of San Diego Canyonlands' Projects

BOARD OF DIRECTORS Election winners!!!



The winners of the election for the CNPS-SD Board for 2012 are:

Connie di Girolamo
Mike Evans
Frank Landis
Greg Rubin
Kay Stewart

Board officers (President, Vice President, Secretary and Treasurer) will be determined at the January 2012 Board meeting.

BOARD MEETING

Wednesday, January 4, 6:30 - 8:30 p.m., monthly CNPS San Diego Chapter board meeting to be held at 4010 Morena Blvd, Suite 100, San Diego (Thomas Guide 1248 C4). Exit I-5 to Balboa Dr. east and turn north on Morena Drive. Proceed 1/2 mile and make a u-turn at the Avati Street signal and turn into the driveway for 4010. Drive to the parking lot on the west side (away from Morena). Members are welcome to attend as observers. If you want to discuss an issue, please ask to get on the agenda by sending an email to president@cnpsd.org.

TECOLOTE CANYON NATURAL PARK

January 8; 9 a.m. to noon. (The second Sunday this month ONLY, all other months the first Sunday).

A relaxed opportunity to learn plant lore of this coastal natural reserve from a CNPS member. Meet at the Tecolote Nature Center. Wear sun protection and comfortable walking shoes, bring water. 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. The walk is repeated the first Sunday of each month.



CONSERVATION

(re)Reading the Hills

This month's article is about something I thought was more widely known. Given the number of people I've explained this to recently, apparently not.

It's about chaparral, fire, and San Diego's landscapes. While many chaparral plants do germinate after fire, chaparral mostly isn't "about" fire. The best way to understand chaparral is to realize that it's not a self-regenerating pile of firewood, waiting out there to burn down your house. Rather, chaparral is a miniature forest. The trees' canopies are close to the ground because there's not enough water for them to grow taller. Because chaparral's canopy is at ground level, any fire is automatically a canopy fire. Chaparral plants have evolved to survive this.

Chaparral shrubs deal with fire in different ways. There is a group ("obligate resprouters," including scrub oaks,

toyon, cherries, and many other species with berries) which resprout after fire from very deep root systems, and need over 50 fire-free years to reproduce. Then there are the so-called "obligate seeders," (many ceanothus and manzanitas) which typically die after a fire (or after up to a century if they don't burn), and whose seeds sprout after fires. They need decades to reproduce. There are also facultative resprouters, which both resprout after fire and germinate after fire. Chamise is the classic follower of this strategy, as are some ceanothus and manzanitas.

Note the fire-free intervals in that last paragraph, because time since last fire really influences chaparral composition. Scrub oaks tend to dominate in areas that rarely if ever burn. These include areas such as Del Mar Mesa, and they are getting quite rare in San Diego. If fires happen more than every half-century or so, the chaparral tends to be dominated by chamise, ceanothus, and manzanita. If fires occur more than every 20-30 years, both of these disappear, and the areas are dominated by coastal sage scrub. If an area burns much more than once a decade, even coastal sage species can't survive, and the area tends to be covered by weeds and grasses, with the occasional laurel sumac struggling to resprout.

If you can identify the dominant species in an area, you can get a good idea of how often that area burns. This is useful knowledge, too. For example, if you're looking for a new home out in the hills, you can use this information as a good safety guide. The plants will tell you how often the area burns, even if your realtor doesn't know.

Perversely, this is exactly the opposite of how we treat the vegetation. People tend to see chaparral as more of a fire threat than grass and weedlands, even though that demonstrably isn't the case. See the last *Fremontia*, if you want to learn more on this subject.

This little lesson has many ramifications, because there aren't many areas of old chaparral left in southern California. For example, old chaparral tends to have more species associated with it, including the bees that pollinate crops and gardens. How are they doing? How about all the birds that depend on berries and acorns?

Anyway, I've run into a number of people recently who talked about how the brush was going to burn, and I decided it was time to spread the lesson more widely. Hope you find time to explore the chaparral this spring.

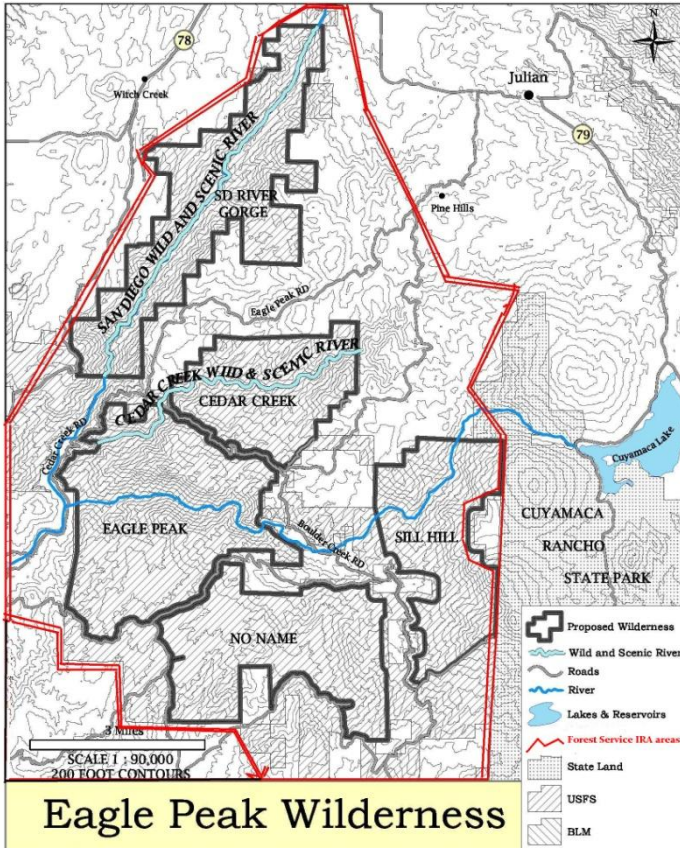
~ **Frank Landis**, Conservation Committee Chair

Second Chance: Cleveland National Forest Management Plan Offers Chance to Protect Roadless Areas

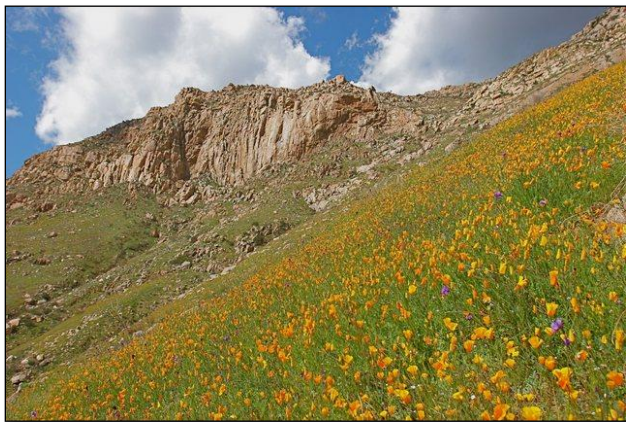
Rarely do we have a second chance to provide strong protection to native plants. During the Clinton era, the Inventoried Roadless Area Order ("IRA"), set guidelines that protected unroaded areas in the Cleveland National Forest (CNF) until now. Early in 2012, the CNF will offer us a second chance when the public will be asked to comment on its new Forest Management Plan (FMP). The new FMP will clarify the status of these areas. **With mounting**

pressure to put energy projects on every square inch of public land your comments have never been more important than right now!

Of top concern is preservation in the Eagle Peak area, which includes Three Sisters Falls, Cedar Creek Falls, Cedar Creek, Boulder Creek, Conejos Creek, and the San Diego River Gorge. This large area has been identified as having five potential Wilderness Units separated by well-used developed access roads (see map). Varied forest and shrub plant communities, and many special species, thrive in the steep and rugged terrain dissected by creeks and crowned by peaks with grand vistas.



The Sierra Club proposes the CNF keep this area as it is, by designating all five units as a single Eagle Peak Wilderness. This would NOT impact use of existing roads or current bicycling trails. Existing classified roads would stay. The goal, rather, would be to protect all the land and natural resources from future power lines, wind farms and other industrial development.
(Continued on p. 4)



Eagle Peak. Photo credit: Kevin Worrall

IT'S FINALLY HERE!!!



Conservation Conference
Conserving and Restoring the Roots
of California's Richness
January 10-14 in San Diego

January 14 is Public Day at the Conference.
The public is invited to...

View:

- Botanical Art and Photography exhibitions
- Scientific and conservation posters made by researchers and CNPS chapter members
- Over 25 Exhibitors in the Exhibit Hall
- University Student Presentations -10:00 am – 4:00 pm; thirteen 20 minute talks on many subjects, excellent for people of all ages interested in pursuing a career in the natural sciences

Attend morning Conference sessions, space permitting:

- Tribal Conservation and Uses of native plants
- Horticulture: Part of Conservation is Growing
- The Vital Role of Education in Conservation

Take short classes presented especially for the public:

- I. Native Plant Gardening:** How to Design a Native Garden, Native Plant Propagation, Beautiful Flowering Natives for your Garden, Attracting Wildlife to your Native Garden.
 - II. Children and Nature for Adults:** Learning in Nature's Classrooms, San Diego Children and Nature Collaborative, Creating Place-Based Science Projects, Parenting in Nature Workshop, Cuyamaca Outdoor School Nature Education Program for 6th graders.
 - III. Children and Nature, for Children:** Drawing Native Plants, Hands-on Gardening Basics, Drawing and Journaling in Nature.
 - IV. Native Peoples and Plants:** Basketry, Native Plant Lore
 - V. Local Projects and Hot Topics:** Regional Conservation Issues, Buena Creek Restoration, Phenology (Study of Native Plant Life Cycles); Fire Management with Native Plants, Amigos de los Rios.
- All events are free. Parking at the Town and Country Center is \$5 for the day.**

See www.cnps.org for full schedule of times, places, and presenters.

(Second Chance - Continued from page 3)

This will only happen if the PEOPLE of San Diego show they value the land in its natural state. In the next few weeks, take time to explore this area, and then write to the CNF to recommend highly protective management strategies for these areas. To request a copy of the FLMP when it comes out contact the Cleveland National Forest in Rancho Bernardo at (858) 674-2901. You can also use <http://www.fs.usda.gov/contactus/cleveland/about-forest/contactus>. All comments are VERY valuable.

~ Cindy Buxton
San Diego Sierra Club Forest Committee Chair

RARE PLANTS

San Diego Coastal Creeper

Did you know there is a plant called San Diego coastal creeper? I did not know that that. I knew of the plant by its scientific name, *Aphanisma blitoides*, or just by *Aphanisma* as it is an MSCP covered species that was not known to have any populations in the MSCP planning area. San Diego coastal creeper is an annual that blooms March to June (or as late as fall in one online reference) in coastal areas (coastal bluffs, beach dunes, coastal sage scrub). The plant was described by Thomas Nuttall in 1849.

Historically, *Aphanisma blitoides* grew from Baja California to Ventura County, including on off shore islands. Craig Reiser reported the species as likely extirpated in San Diego County (see <http://sandiego/sierraclub.org/rareplants>), having grown at the Tijuana River Valley, Silver Strand, San Diego Bay, Point Loma, La Jolla, Pacific Beach, just south of Torrey Pines, San Dieguito Creek, and San Onofre.



San Diego coastal creeper (*Aphanisma blitoides*)

More than a few years ago Rod Dossey sent me a photo showing a brilliantly red plant, *Aphanisma blitoides*, that he found at Cabrillo National Monument. The species grows with more green early in the season but older stems can be a bright red (see photos). **The bright red coloration of the foliage is easily noticed, so if you see such a thing, please report it me and I will pass the info along.** (My contact information is on the back of the newsletter.) We still have remnant coastal bluff areas where there just might be some more San Diego coastal creeper growing.

~ Cindy Burrascano



The Torrey Pine – Part 2

The history of the Torrey Pines Preserve has been documented by Judy Schulman of the Torrey Pines Docent Society. The area of Torrey Pines State Park has been inhabited by humans for thousands of years; however, the first efforts to protect the trees was made in 1885 by the San Diego County Board of Supervisors who posted signs citing a reward of \$100 for apprehension of anyone who was caught vandalizing a Torrey pine tree. In 1890, some of these lands owned by the City of San Diego, known as Pueblo Lands, were leased for cattle grazing and some trees were cut and used for firewood. Through efforts of Daniel Cleveland (a well-known botanist), George Marston and Belie Angler, the City set aside 364 acres of these Pueblo Lands as a park for Torrey pines. Additional lands were in danger of being sold and Ellen Browning Scripps acquired some lots and willed them to the people between 1908 and 1911.

Guy Fleming (the “John Muir” of Torrey Pine State Park) and Ralph Sumner conducted studies on the park and found it was being impacted by heavy use. A preserve was established and Fleming was appointed as the custodian. During the 1920s, the Torrey Pines Lodge was built and additional lands acquired.



Torrey Pines Lodge is now the Torrey Pines State Park Visitor Center.

A road was proposed over the bluffs of the park and was fought successfully. During World War II, portions of Torrey Pines Mesa were used for a military camp. During the 1950s, automobile races were held on the old road through the park. In 1956, a special election was held that transferred 1,000 acres to the State Park Reserve System. The stand of pines on the north side of Penasquitos Lagoon was preserved in 1970 after a long battle to prevent its destruction. Unfortunately, during the 1970s much of the remaining Pueblo Lands south and east of the park were sold by the City of San Diego for development, greatly reducing the biological preserve system that could have been.

The efforts to preserve the Torrey pines on Santa Rosa Island included National Park acquisition of the land with a gradual phase-out of the major cattle operation there. All cattle were removed by 1998. The last feral elk and deer, which have been impacting efforts to recover the vegetation on the island, were scheduled to be removed by the end of 2011.



Torrey Pines on Santa Rosa Island (author's photo)

There is some question of whether or not Torrey pines ever grew on Point Loma. The habitat appears to be present, but early activities, including collecting wood for fire to cook whale blubber and dry cow hides, took place on the lower slopes of Point Loma at Ballast Point (Dana, 1840). These types of activities may have had an impact on any tree wood sources that were nearby, including pine trees that could have grown there. Unfortunately, documentation does not exist to indicate that pines occurred there.

Major impacts to Torrey pines occurred during the drought years from 1987 to 1992. Bark beetles killed a number of the trees, many of which had been planted by Fleming. At this time, the future of the Torrey pine appears relatively secure; however, climatic change and repeated fires would have a serious effect on the trees in the park.

Non-native weeds have also invaded the park, including South African veldt grass (in the genus *Ehrharta*). Major efforts by the State Park system and Mike Kelley and others have beat them back, providing the native wildflowers an opportunity to persist, but it is an ongoing effort according to Darren Smith and other State Park personnel. Fortunately, they have been successful in recent years and there is nothing like a spring walk through Torrey Pines State Park where Ground pinks (*Linanthus dianthiflorus*), California poppies (*Eschscholzia californica*) and Sea dahlia (*Coreopsis maritima*) appear in full flower around and among the twisted and bent Torrey Pine trees.

~ Tom Oberbauer

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Torrey pine cone and needles

Gardening and Restoration CNPS-SD Garden Tour

We are very excited to formally announce that the California Native Plant Society (CNPS) will host the first ever, regional San Diego Native Garden Tour in April 2012. This public celebration of native plants and conservation gardening will profile exemplary residential, commercial, and institutional native landscape designs throughout the San Diego region.

The CNPS San Diego Garden Tour will demonstrate a world of possibilities in native gardening with self-guided tours of gardens across the many diverse environments of San Diego, showcasing gardens small to large, formal and informal, and natural gardening at its finest. The event will span two weekend days (28 and 29) with an opening reception for CNPS members, event sponsors, industry leaders, and members of the media.

With the exploding interest in home gardening, water conservation, and sustainability, we believe this event has the strong potential to become San Diego's most popular regional garden tour. As the event grows in popularity, we hope to be able to say you were all with us from the start.

We will need a good number of volunteers to help with logistics. Volunteer docents, who have a good familiarity with native garden plants, will be needed to lead guided tours of the gardens. Send an email or call either Clayton Tschudy (858 774 7692; tschudyecodesigns@gmail.com) or Susan Krzywicki.

Garden Work Parties

Old Town Historic State Park Native Garden: January 14 (Saturday), 1:00 to 3:00 p.m. Primp the Native Plant Garden for State Conservation Conference group visiting at 3:30 the same day!

The Native Plant Garden in Old Town State Historic Park illustrates the landscape that was by the San Diego River when Europeans arrived and established Old Town San Diego at the site of a Native American village called Kosoy. Bring your garden gloves and planting tools, and pruning

snips or loppers if you have them. We will continue to trim off excess natural willow twigs to create little shelters for our new plants, to protect them from footsteps, and tidy up some of last year's spent seed heads. We'll look for seedlings from our wildflower seed spreading, and carefully dig out cheeseweed and heron's bill (weeds) where we find them.

The Native Plant Garden is at the far west end of Old Town, at the corner of Taylor and Congress Streets (Thomas Guide 1248 F5), right across from the depot building at the train/trolley/bus station. Come by mass transit and cross at the corner and you are there; or if you drive, park in the free state park parking lot at Calhoun and Taylor, or across Taylor in the CalTrans Parking lot. Bring water if you would rather not use the drinking fountain. Restrooms on site.

Point Loma Native Plant Garden: January 7 and 15, 9:00 – noon. Rain cancels; bring water; no facilities; tools/supplies provided. Usually the first Saturday & third Sunday of each month. Contact Richard@sandiegoriver.org for more info.

Response to “Naturally Large Fires in Southern California”

In the latest Fremontia (Spring Summer 2010), Jack Cohen summarizes the long standing understanding that fire suppression has allowed unnatural fuel levels to accumulate in forest systems, thus changing fire regimes from frequent surface fires to less frequent, intense, stand replacing fires throughout the west. He illustrated it with photographs and referenced scientific studies that came to that conclusion. This is a widespread and accepted concept. It is for this reason that National Parks, such as Yosemite, and National Forest lands conduct controlled burning programs.

The San Diego County mountains are examples of this condition. In these mountains, young trees have grown up in the shade of adult trees and increased the density of the forest. In the 2002 Pines Fire, 2003 Cedar Fire and 2007 Witch and Poomacha Fires, very dense coniferous forest was eliminated from vast areas. The majority of Middle Cuyamaca Peak, Cuyamaca Peak and Stonewall Jackson Peak supported old growth coniferous forest including a mix of trees hundreds of years old and high numbers of young trees, and all were killed in the Cedar Fire.

It has been documented that little pine reproduction has occurred since the Cedar Fire (Franklin *et al.*, 2006; Goforth and Minnich, 2008). Large conifers, including Incense cedar (*Calocedrus decurrans*), White fir (*Abies concolor*), Ponderosa pine (*Pinus ponderosa*), Jeffrey pine (*Pinus jeffreyi*) and Sugar pine (*Pinus lambertiana*), typically require adult trees nearby for reproduction. Using Sugar pines as an example, the seeds are viable for a relatively short time following release from cones and the heavy seeds do not disperse far, though some animal transport may locally assist in their movement (Kinloch and Scheuner, 1990). If the adult trees are killed by fire,

the seeds must be dispersed back from other forest areas to fill the area in which the trees were eliminated by fire. If a massive fire kills all of the trees over a large area, including adults, it would take a long period of time, potentially hundreds of years for the trees to naturally disperse into the areas formerly occupied. In the case of the Cuyamaca Mountains, these large forest trees have been eliminated from major portions of their former range. On Middle Cuyamaca Peak, where huge multi-century old Sugar pine trees were killed by the Cedar Fire, no Sugar pine reproduction is occurring; in fact, very little pine reproduction is occurring at all (Franklin and Bergman, 2011). Sugar pines appear to have been nearly or completely eliminated from Middle Peak that was a former stronghold for this largest species of pine. Based on Franklin and Bergman's paper, the only apparent location where Sugar pines are reproducing is a narrow band to the northeast of Cuyamaca Peak where a relatively small number of trees did survive the Cedar Fire. Under natural conditions, it is possible that they will disperse back to their former areas, but it would likely take centuries.

Drought from low rainfall has obviously exacerbated the situation by creating stress for all of the forest trees with many of them dying from lack of water. Competition for limited water between trees in an unnaturally dense forest would be greater and likely results in greater mortality of all trees. If the forest was not so dense, it is likely that fewer trees may have died from drought effects. Logging and grazing has occurred in San Diego County mountains, but logging ceased many decades ago with little effect to increase density of trees, and cattle grazing by itself would typically not be expected to result in higher densities of conifers.

The Naturally Large Fires in Southern California article published in the December 2011 CNPS-SD newsletter quotes a 19th century news account as data to indicate that stand replacing fires in the Cuyamaca-Julian area are not unusual. Certainly forest fires did occur that killed trees in the past. One must recognize that the modes of transportation, horse drawn carriage or on foot, and perspective for news writers from the 1880's were quite different than modern times and may have had an effect on their impression of fire damage. If the fires described in that old news report did in fact occur at the breadth and intensity stated, the forest would have been eliminated and would have had to reestablish itself to the level observed in Cuyamaca in early 2003, including many very old and large trees. Given the natural history of the conifers and need for parent trees, there would not have been enough time since 1889 for the forests present in 2003 to have regrown from areas where forests were supposedly eliminated in 1889. In other words, if the fires described in the old newspaper report occurred in a manner similar to the Cedar Fire, the forest in the Cuyamaca Mountains, including a number of very old trees, would not have been there to burn in the Cedar Fire. The forests were there indicating that they were not burned as extensively as implied in that old local news article.

Lightning is a major factor in starting fires in San Diego. For example, for single day events, on September 13, 2011, the National Weather Service indicated 328 lightning strikes in San Diego County mountains resulted in 3 fires and two more fires the next day. On September 29 of this year several fires were started by lightning, including a 75-

acre fire near Sunshine Summit. These were followed the next day by an additional four fires caused by a lightning storm. Other examples from reports in the San Diego Union Tribune include July 22 and 23, 2005, when 15 fires were started by lightning, and September 1 and 2 of 1987 when ten fires were started by lightning in San Diego County. In addition, fire was used by local inhabitants who resided in this area for at least the last 10,000 years (San Dieguito Harris Archaeological Site). Currently, human caused fires are the major source of fires but lightning alone would result in regular fires that could keep understories cleared.

A study in Southern California forested areas analyzed fire scars on trees to assess the frequency of fires (Skinner *et al.* 2006). For the Cleveland National Forest and Cuyamaca Rancho State Park, they found that the average fire return interval ranged from 4 years at Cuyamaca to 13 years at Mount Laguna. They also found that “A visual inspection of fire-history charts indicate that the fire intervals recorded as fire scars in the twentieth century were not as frequent or widespread as in previous centuries. A discontinuity in frequent fires occurs in most sites, beginning as early as 1900, but becoming increasingly apparent after 1925. Fire frequencies are shorter prior to the discontinuity than afterwards.”

This is an indication that fire suppression reduced the number of fires from what had occurred during the previous centuries. Reduction in fires would have resulted in the increase in forest density and understory growth. A review of the fire scar chart also indicates that there were fires in the late 1800s but they were obviously not severe enough to have killed the trees.

Scientific references and studies in the San Diego and Southern California region indicate that fire has had an active role in affecting vegetation. Fire suppression in forested areas in particular has resulted in increased densities of trees and rarer but more intense fires that have killed coniferous forests.

~ Tom Oberbauer

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Other Organizations' Activities

January 9, 10 a.m. For those of you east of the mountains, Dr. Jon P. Rebman, curator of the Botany Department at the San Diego Natural History Museum, will speak at a meeting of the Anza-Borrego State Park Botany Society the Anza-Borrego Desert State Park Visitor Center's Discovery Lab in Borrego Springs. The public is invited. Dr. Rebman's will speak about the third edition of the Baja California Plant Field Guide, which he wrote with the late Norman C. Roberts. The guide is scheduled for publication in spring 2012.

On **January 7**, Dr. Rebman will speak on what makes Baja California and its plants so unique, and on **January 8** will lead a field class. For information, call the Anza Borrego Foundation at (760) 767-4063.



Jon Rebman with daughter Samantha collecting plant specimens as part of the San Diego Plant Atlas project in the southern part of Anza-Borrego Desert State Park. Dr. Rebman is the director of the San Diego County Plant Atlas project, which has seen more than 54,000 specimens collected since 2003.

The CNPS-SD Newsletter is 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. The author has the final say on whether the article, as edited, is printed in the newsletter. Submissions are due by the 10th of the month preceding the newsletter; that is, January 10 for the February newsletter, etc. Please send submittals to newsletter@cnpsd.org.



CALENDAR FOR JANUARY 2012

- 1/7: Point Loma Native Garden Work Party (p. 6)
- 1/8: Tecolote Canyon Public Walk (p.2)
- 1/4: Board Meeting (p. 1)**
- 1/10-14: CNPS Conservation Conference (p.3)**
- 1/14: Old Town Work Party (p. 5)
- 1/17: Chapter Meeting (p. 1)**
- 1/15: Point Loma Native Garden Work Party (p. 6)

MEMBERSHIP APPLICATION

___ Student or Limited Income \$25; ___ Individual \$45; ___ Family or Library \$75
___ Plant Lover \$100; ___ Patron \$300; ___ Benefactor \$600; ___ Mariposa Lily \$1,500

Name(s): _____
Address: _____
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
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January 2012 Newsletter

Dedicated to the preservation of California native flora

CALIFORNIA NATIVE PLANT SOCIETY – SAN DIEGO

www.cnpssd.org

info@cnpssd.org

BOARD MEMBERS (OFFICERS TO BE DETERMINED AT THE JANUARY BOARD MEETING – use these e-addresses until then)

Kay Stewart.....(619) 234-2668
president@cnpssd.org
Tom Oberbauer.....vicepresident@cnpssd.org
Tom Beltran.....secretary@cnpssd.org
Connie Di Girolamo.....treasurer@cnpssd.org
BOOK & POSTER SALES: Cindy Burrascano.....(858) 578-8040
booksales@cnpssd.org
RARE PLANT SURVEYS: Frank Landis.....(310) 883-8569
raresurvey@cnpssd.org
NEWSLETTER: Bobbie Stephenson.....(619) 269-0055
newsletter@cnpssd.org
NATIVE GARDENING: Susan Krzywicki.....gardening@cnpssd.org
MEMBER-AT-LARGE: Jonathan Dun....jonathandunn@cnpssd.org
MEMBER-AT-LARGE: Greg Ruben
MEMBER-AT-LARGE: Mike Evans

CHAPTER COUNCIL DELEGATE

Dave Vamer.....(619) 630-4591, chaptercouncil@cnpssd.org

RARE PLANT BOTANIST

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

APPOINTED COMMITTEE CHAIRPERSONS

CONSERVATION: Frank Landis.....(310) 883-8569
conservation@cnpssd.org

FIELD TRIPS FOR MEMBERS: Kay Stewart.....(619) 234-2668
fieldtrips@cnpssd.org
FIELD TRIPS FOR PUBLIC: Paul Hormick.....phbb@pacbell.net
HOSPITALITY: Betsy Cory.....(619) 656-8669
hospitality@cnpssd.org
INVASIVE PLANTS: Arne Johanson.....(858) 759-4769
invasiveplants@cnpssd.org
MEMBERSHIP: Adrienne Heintzelman.....(858) 761-7007
membership@cnpssd.org
PLANT PROPAGATION: Connie Beck.....(619) 749-4059
propagation@cnpssd.org
PLANT SALE-FALL: Carolyn Martus.....plantsale@cnpssd.org
PLANT SALE-SPRING: Kristen Olafson.....
springplantsale@cnpssd.org
PROGRAMS: Claude Edwards.....(619) 282-8687
programs@cnpssd.org
PUBLICITY: Pat Fishtein.....(619) 280-8234
publicity@cnpssd.org
PUBLIC OUTREACH: Margy Day.....(858) 603-1908
publicoutreach@cnpssd.org
SEED COLLECTION: Jason Sundberg.....(906) 251-0392
seeds@cnpssd.org
VEGETATION: Anna Bennett.....(559) 443-9233
vegetation@cnpssd.org
WEBSITE: Mary Alice Kessler.....webmaster@cnpssd.org