VOL 41 / NO 3 JULY–SEPTEMBER 2011

CALIFORNIA NATIVE PLANT SOCIETY

BULLETIN

Conservation Planning in Mojave Desert

Solar energy development fails to protect corridors between natural areas

By Tara Hansen and Greg Suba

Renewable energy projects in the California desert have become a significant challenge for CNPS and other environmental groups involved with desert project planning. CNPS's long-stated position supports the development of renewable energy projects that are sited away from "core" sensitive plant habitats and plant communities and do not interrupt important wildlife corridors.

When sited without regard for these important natural resources, CNPS will oppose the permitting of a renewable energy project. Conserving and protecting the desert require that we not only be activists, but also be educated about desert conservation processes.

CORE CONSERVATION AREAS

In an environmentally responsible land-use planning effort, a first step in conserving botanical (and other important natural) resources is identifying ecologically intact areas and communities with rich biodiversity, often at high risk and considered irreplaceable. Once these have been identified, they are commonly referred to as "core conservation areas." Classifying an area in this way essentially recognizes it as suitable for designation as a "nature reserve" that has not yet been protected. If not protected, development in these areas could impact the survival of one or any of the multitudes of plant and animal species represented there.



Julie Evens

Intact desert landscape or "core conservation area" in the Mojave National Preserve near the New York Mountains. Joshua tree *(Yucca brevifolia)* is a dominant tree species, along with a diverse mix of understory shrubs and grasses.

Once core conservation areas are identified, a reserve design is developed along with conservation strategies and management plans to ensure that the reserve system's overall conservation goals are met. This includes the establishment of natural

(continued on page 6)

Conservation Conference

Register by November 1 and save!

CNPS 2012 Conservation Conference
Conserving and restoring the roots of California's richness

By Josie Crawford

The CNPS 2012 Conservation Conference may be six months away, however now is the time to:

- Register! Receive early registration discounts through Nov 1, 2011.
- Send in your abstract. Final deadline is August 4, 2011.
- Sponsor the conference. Pledge now and maximize your exposure.
- Donate to the Silent Auction. Contribute art, vacation rentals, crafts, books, and more.
- Select photos and complete illustrations for the photo and botanical art contests.
- Write poems for the poetry reading.
- Volunteer on a committee OR for days of the conference and receive a registration rebate.

Please go to *www.cnps.org/2012* for all the latest information and to register.

(continued on page 6)


Austin Hall

Brett Hall

From Your Board of Directors

Part of Conservation is Growing

By Brett Hall

[From the Editor: Beginning with this issue, the "From the Executive Director" *column that Tara Hansen has written will be replaced with a* "From Your Board of Directors" *column, which will be written by various board members. This will give CNPS members an opportunity to find out what things are on the minds of those responsible for the financial and administrative operations of the Society. Occasionally Tara Hansen will also contribute a column.]*

Wildland stewardship and growing native plants are both important to ecosystem conservation. In today's expanding horticultural markets, the demand is high for native plant species that are acclimated to varied climatic and soil regimes, and that therefore require less "energy" (water, fertilizer, pesticides, etc.).

Perhaps the most fascinating approach is that of *regional native plant horticulture*, which involves growing natives from your local region. The scale for *region* may work like a kaleidoscope or a GPS depending on one's perspective or goals. This approach offers many benefits: extending genetic diversity through seed storage, planting small populations in non-wild landscapes, or developing local selections through asexual reproduction from wild populations, especially when sampling many rather than just one individual. This work is important because population extinctions are taking place all the time due to global warming, habitat fragmentation, and invasive species impacts.

While regional native plant horticulture may not save the world, it is worth doing. Few nurseries specialize in or offer regional natives from local populations. *Native Here Nursery* operated by the East Bay Chapter of CNPS, several Chapter plant sales, and a handful of contract nurseries up and down the state are shining examples of places that do. There is tremendous room for more enterprises that sell local natives, but it requires astute marketing and careful educational outreach to be successful.

Brett Hall is president of the CNPS Board of Directors, arboretum director at the University of Santa Cruz, and an active member of the Santa Cruz County Chapter of CNPS.

CALIFORNIA NATIVE PLANT SOCIETY
2707 K Street, Suite 1
Sacramento, CA 95816-5113

Phone: 916-447-2677 Fax: 916-447-2727
Email: *cnps@cnps.org*
Website: *www.cnps.org*
CNPS Bulletin Email: *bhass@cnps.org*
Tara Hansen, Executive Director

2010 BOARD OF DIRECTORS
Brett Hall, President
Lauren Brown, Vice President
Sarah Jayne, Secretary
Carol Witham, Treasurer
Orchid Black (CC Rep),
Laura Camp, Ellen Dean,
Arvind Kumar, Brian LeNeve (CC Rep),
Nancy Morin, Vince Scheidt,
Alison Shilling

CHAPTER COUNCIL
David Magney, Chair
Larry Levine, Vice-Chair
Marty Foltyn, Secretary

CNPS BULLETIN
Bob Hass, Editor
Lisa Roth, Design
Diana Hickson, Arvind Kumar,
Joe and Doris Willingham, Proofreaders

MAILING LABEL CHANGES
Send to: *mmillett@cnps.org*

MCV2 Authors Receive Award

The authors of *A Manual of California Vegetation*, 2nd edition, have received the Honorable John C. Pritzlaff Conservation Award from the Santa Barbara Botanic Garden (SBBG). They include John Sawyer, professor of botany emeritus at Humboldt State University, Todd Keeler-Wolf, senior vegetation ecologist with the California Department of Fish and Game (DFG), and Julie Evens, CNPS vegetation program director.

The award, established in 2007, is presented to those whose work has made a significant contribution to the conservation of California's natural environment. John Pritzlaff was a SBBG trustee for many years and was committed to conservation.

The first edition of the *Manual* was published in 1995, and filled a void in California resource management. Its vegetation classification system has been adopted as the standard by state and federal agencies, and is also widely used by consulting firms and planners. The second edition, published in 2009, provides an updated and more complete description of California ecosystems, and includes new information on disturbance regimes and climate change.


Brandon T. Davis

Left to right: John M. Wiemann, Ph.D., Chairman of the Santa Barbara Botanic Garden's Board of Trustees, awardees John Sawyer, Todd Keeler-Wolf, and Julie Evens, and the Garden's President, Steve Windhager, Ph.D.

In Appreciation: Gene Doherty

An IT "Angel"

Some nonprofits are lucky to receive in-kind donations of food or furniture, but CNPS recently received a truly incredible one: a new server and time necessary to set it up.



Norma Deaner

Gene Doherty

Gene Doherty, information technology (IT) professional, avid hiker, and CNPS volunteer, purchased a new server for the CNPS state office as an upgrade to the one that the state office depended on for operations. When asked what compelled him to donate such an expensive and indispensable piece of technology to CNPS, Gene, who has worked in the IT field since 1987, replied:

"My professional career has been about providing technology solutions to enable businesses and organizations to reach their goals. Because of this background, I learned of the struggles that the state CNPS office was experiencing with their technology being out of date. Being someone that spends more time in front of a computer than in front of plants, I simply wanted to contribute to our organization in the best way that I could."

What makes this act even more remarkable is that Gene had to arrange to take a couple of days off of work to come to Sacramento to install the new server. What's remarkable about that? Gene has been occupied on an extremely time-consuming project for the U.S. Army— helping to implement a better technology solution for the Arlington National Cemetery.

When not working for Uncle Sam, in his "free" time Gene is the president of the Willis Linn Jepson Chapter and can often be found volunteering in the Forrest Deaner Native Plant Botanic Garden that the chapter created and maintains in the Benicia State Recreation Area.

CNPS appreciates the enthusiasm, resourcefulness, and generosity with which Gene approaches all his endeavors, and is proud to count him as one of our valued volunteers.

Stacey Flowerdew
CNPS Membership and Development Coordinator

CNPS Wish List

As many of you are well aware, CNPS runs a tight ship. Limited funding requires that we order financial priorities carefully to ensure that we remain effective and efficient. This often means that we are in need of items that would save us considerable time and expense, but we don't have the funds to purchase them.

For this reason, we have included a Wish List in this edition of the *CNPS Bulletin*, and also on the state CNPS website at *http://cnps.org/cnps/support/wishlist.php*. Our hope is that it will offer our supporters insight into the tools we rely upon regularly, and will allow them to donate specific items we need for ongoing programs and initiatives.

EDUCATION PROGRAM WISH LIST

- *Jepson Manual* (any condition) for Danny Slakey, our new state Rare Plant Treasure Hunt Coordinator

VEGETATION PROGRAM WISH LIST

- Mid-sized 4x4 auto, SUV, or van for our statewide vegetation surveying and mapping. Weekly rentals run around $400–$500, and we use these vehicles for at least 12 weeks per year.
- Portable field computers (3): Toughbook rugged computers
- Rechargeable AAA NiMH batteries (8)
- Midland GXT760VP4 2-way radios (1 pair)

RARE PLANT PROGRAM WISH LIST

- Filing Cabinets (2): Two-drawer vertical filing cabinets (black only), letter size (8.5″ x 11″), 28″ H x 15″ W x 21.5″ D. Size can vary slightly, but no taller than 28.5″ and no deeper than 29.5.″

ASSORTED REFERENCE BOOKS ON NATIVE PLANT SPECIES.

The full list is available on the state website.

To donate items, please contact Sandy McCoy, *sandymccoy@mindspring.com*, or contact the state CNPS office at 916-447-2677.

CHAPTER NEWS

WILLIS LINN JEPSON CHAPTER:

Motivating Community Garden Volunteerism

In 2000 Solano County's Willis Linn Jepson Chapter collaborated with the California Department of Parks and Recreation to establish the Forrest Deaner Native Plant Botanic Garden within the Benicia State Recreation Area. Named after the Chapter's first president, this 3.5 acre botanic garden features almost 3,000 native trees, perennials, shrubs, and grasses.





Left: A section of the garden containing species of the Valley Grassland plant community. In the front is Santa Barbara sedge *(Carex barbarae)*, behind it is bog rush *(Juncus effusus)*, and then deer grass *(Muhlenbergia rigens)*. At the back can be seen the green top of quailbush *(Atriplex lentiformis)*. Photo by Norma Deaner. Right: The author weeding one of the garden's many 10x10 plots that volunteers have "adopted."

With the success of the Garden, maintenance has become more important. Every Saturday from 9:30 to 11:30 A.M., the chapter invites volunteers to work on routine maintenance tasks. To improve maintenance in the established areas, this past September chapter member Dan Jensen started a new program called Project 10x10. Volunteers select a 10x10 foot area to keep weed-free by tending the garden one or more hours per month. The purpose of adopting a 10x10 plot was to make tending and weeding sound easy. What we found out, however, is that new people quickly branched out into 10x10 *yard* areas, because it really is easy to weed an area of only 10 feet by 10 feet.

Soon we launched a website *(www.10x10with.us.)* to coordinate information for new volunteers who joined the garden volunteer team. It provides information on the program (weeding, tending), scheduled times for group sessions and special events, and allows volunteers to post notes and collaborate on their experiences. The site also provides a Google Earth map with the garden areas displayed, where volunteers can click and learn more about the plants in each area. The site is linked to CalFlora's database of California native plants.

Another component of the 10x10 Project was to establish a structured learning program. I had been a volunteer for many years, and while I was considered a good worker, I didn't know much about the native plants in the garden. With the help of a few volunteer teachers and our chapter's best plant specialists, we created a monthly publication focused on several areas related to native plants, including information highlighting specific areas of the garden.

Each section of the garden is designed around a theme, such as residential landscapes, food and shelter for birds and butterflies, plants popular among Native Americans, or a plant community found in Solano County. The monthly publications don't take anything for granted, so they start with the definition of a common name and why it might be important to have scientific names of plants. They then move quickly into more advanced topics like strategies for plant survival and invasive weed eradication. Each issue also contains a featured plant of the month and weed of the month.

Since starting the program, nine new volunteers have joined our Garden Volunteer Group and we are only in our first three months of operation! We discovered that once we got people to show up at the garden, then nature and the native plants "took over."

Anyone who would like to find out more about the 10x10 Project is invited to contact the author at 707-980-4416 or datadcj@gmail.com.

Dan Jensen
W.L. Jepson Chapter

CHAPTER NEWS

SOUTH COAST CHAPTER:
Restoring a native plant garden

This is a story of native plants and synchronicity. In the late 1950s and early 1960s, the Hermosa Garden Club had a section of Valley Park in Hermosa Beach designated as a garden for native plants. The Club asked Theodore Payne to visit and advise them; he then made three trips to Hermosa Beach. Perhaps California's best-known horticulturist, Payne lectured across the state on preserving its wildflowers and native landscapes, and by the time he retired he had made over 400 species of natives available to the public.

The Club honored Mr. Payne posthumously when the garden was formally dedicated and named in his honor in 1966. Mrs. Edmund G. Brown, wife of the then-governor, and mother of the current governor, Jerry Brown, was photographed along with two Club members, planting a sycamore in the garden. Today that tree flourishes, along with two 100-foot-long ceanothus hedges and naturalized elderberry *(Sambucus mexicana)*. Specimens of toyon *(Heteromeles arbutifolia)* and lemonade berry *(Rhus integrifolia)* were pruned as trees. However, while these larger natives thrived, the numerous smaller plants that used to be the centerpiece of the garden have not. This is due in part to their being shaded out, over the years, by some trees that grew very large.

In 2010, in a serendipitous event, a Hermosa Beach resident asked a CNPS South Coast Chapter member for guidance on a proposed public native plant installation. Together they gave a presentation to the Public Works Commission. While listening to the presentation about native plants, a commissioner was reminded of the historic sign still standing in the neglected native plant garden named after Payne. Ideas coalesced around this historic sign and garden, leading to the first meeting of the Committee to Restore Theodore Payne Native Flora Garden. The Committee quickly decided to limit its first restoration project to a delineated portion of the original garden.



David A. Sundstrom

One-hundred-foot-long Ceanothus 'Yankee Point' hedges in Valley Park, near the Theodore Payne Native Plant Garden.



David A. Sundstrom

The original sign from a native plant garden named after California horticulturist Theodore Payne in 1966.

It then applied for and received a $5,000 grant from the South Coast Chapter, which had the previous year received a bequest of $400,000 from member Elaine Conze for native plant gardens. The Committee is now finalizing plant selection and garden design, with the intent to respect both Theodore Payne's and Elaine Conze's historic visions.

Since the Valley Park project was funded, the South Coast Chapter has funded two other requests, each from a science professor. One grant will be used to bring native plant gardens into schools. The other will be used to expand a native plant garden in Los Angeles County's Alondra Park.

Anne Eli Rizzardi
South Coast Chapter

Conservation Planning *(from page 1)*

corridors for plant and animal migration, so that protected areas do not become isolated like islands in a sea of development. It also includes the conservation of ecological processes and gradients in the reserve, and buffer zones between natural areas and developed areas, so wildlife have room to adapt and evolve away from the impacts of human communities.

THREAT TO MOJAVE DESERT

To date, the Mojave Desert has had no broad ecological planning process to guide the siting of huge wind and solar energy projects. While some core conservation areas have been identified and reserve areas have been established in the desert, the natural corridors between them have not all been identified or remain unprotected. Instead, project applications have been accepted and approved in the rush to develop alternative energy sources before any kind of comprehensive natural resource planning has taken place. Consequently, projects have been approved in unprotected but highly valued botanical and animal habitats, and in some cases natural corridors have been cut off. Under these circumstances, the likelihood of species decline is high.

The Desert Renewable Energy Conservation Plan (DRECP) offers some hope in the wake of the initial rush of project permitting in the desert. Despite being behind the development curve, the DRECP received some limited funding and has been authorized to create vegetation maps using GIS technology to identify essential critical habitats. While coarser than CNPS would like to see, these maps will give the agencies responsible for managing our public desert lands the tools to help identify areas that *are* and *are not* suitable for projects. Applicants will then pursue renewable energy projects in areas less likely to impact critical habitats.

CNPS'S ROLE

To date, CNPS has provided plant data necessary to guide planners towards areas that should be included in the initial mapping efforts. As a member of the DRECP Stakeholder Group, we attend weekly statewide planning meetings to advocate for CNPS's conservation interests. The California Desert is a biologically rich and amazing place. We want to ensure that important plant habitat areas are protected for future generations, while also supporting the development of the energy alternatives we need.

Tara Hansen is CNPS Executive Director. **Greg Suba** is CNPS Conservation Director.

Conference *(from page 1)*

SOMETHING FOR EVERYONE

From volunteers removing invasive weeds to biologists studying gene sequences, the conference draws a wide breadth of researchers and practitioners from many disciplines and types of organizations. This is the *only* conference in California that focuses on applied science and research for conservation of native plants and habitats. Every participant will have opportunities to absorb cutting-edge knowledge, learn skills, and make contacts that will enhance their conservation-related careers or volunteer work. The sessions address subjects ranging from planning and policy to restoration and management to horticultural science. The conference expects to draw up to 1,000 participants.

CONFERENCE HIGHLIGHTS AND WAYS TO PARTICIPATE:

Plenary and keynote speakers include Dr. Peter Raven, long-time director and now president emeritus of the Missouri Botanical Garden, and Dr. Bruce Pavlik, professor of biology at Mills College and head of Restoration Ecology, Royal Botanic Gardens, Kew, England.

- Over 200 accomplished presenters on 22 session topics
- Scientific poster session
- CNPS Chapters poster session showcasing conservation and restoration projects
- Students: special session, contests, discounts, scholarships, and travel stipends
- Two days of pre-conference workshops and field trips
- A Science Café for roundtable discussions on hot topics.
- Over 25 exhibitors and vendors
- Photo contest and botanical art contest
- Poetry and spoken word event
- Social events, working groups, and associated meeting opportunities
- Public Day Celebration, Saturday, January 14, with workshops and field trips
- Time to see old friends and colleagues, make new ones, and network

WHAT'S NEW IN 2012?

The 2012 conference will feature a number of exciting new activities. We have added a special Student Session that will allow more students to present talks. We will host a Science Café with roundtable discussions. We expect a more diverse group of participants, along with new sessions and workshops on conservation on Tribal lands, ethnobotany, Mexican cross-border conservation issues, and a panel on inclusivity. And on Saturday, January 14, we will host a Public Day, with workshops, exhibits, and field trips specifically for children and adults on gardening with natives, Native American uses of native plants, and drawing from nature.

Josie Crawford is CNPS Education Program Director and Conference Coordinator.

Native Plants and Pollinators

Helping stem the tide of declining bee populations

By Meghan Walla-Murphy

Since 1622, when the honey bee (*Apis mellifera*) arrived in North America, it has been relied upon for pollination by farmers and gardeners alike. But in 2007 a massive die-off of European honey bees in the U.S, called Colony Collapse Disorder, resulted in a population decline between 30% to 70%. Since then an additional 30% decline has been recorded each year. Reasons given to explain this loss include pesticides, parasitic mites, disease, migratory bee keeping practices, monocropping, and genetically modified crops containing pest control characteristics. In addition, commercially modified plants lacking sufficient nectar and pollen create an even more unfriendly environment for bees to thrive.

Alarmed by this precipitous decline, horticulturists have begun turning their attention to California's native bees for pollination. Yet like the honey bee, native bees are also at risk. However, easily managed, low-maintenance native plant gardens that are well adapted to California's growing conditions can help reduce factors working against California's native bees. To begin growing a native bee garden, assess the land to be planted before shovel even hits the dirt. Take account of shaded and sunlit areas. Note if water drains quickly or holds in the soil. Pay attention to wind exposure. Bees proliferate in areas of sunshine protected from wind. These factors will help determine the best places to begin planting.

Consider growing various flower colors when choosing plants that allure native pollinators. A bee's eyesight covers a broad spectrum and different colors invite a diverse group of pollinators. Preferred colors are blue, purple, violet, white, and yellow.



1: Chris Lewis; 2: Laura Camp; 3: Carol Rogala

Left to right: Silver bush lupine *(Lupinus albifrons),* white flowering currant *(Ribes indecorum),* and sage *(Salvia clevelandii* 'Whirley Blue').

Also choose species with a range of flower shapes. Different pollinators are adapted for different shaped flowers. For example the disc flowers of the California aster (*Aster chilensis*) attract different pollinators than the tubular flowers of a California honeysuckle (*Lonicera* spp.). Assorted shapes encourage biodiversity.

Perhaps most important is to plant species that flower during different months. This ensures that bees have a supply of nectar and pollen year-round. Currants and gooseberries (*Ribes* spp.) bloom late in the year and through to March. White flowering currant (*Ribes indecorum*) begins to flower in November and may continue until March, while golden currant (*Ribes aureum*) opens its buds in February through April. California lilac (*Ceanothus* spp.), toyon (*Heteromeles arbutifolia*), and manzanita (*Arctostaphylos* spp.) also bloom in winter and/or spring.

As spring takes hold, many of the species in the pea family spread their petals. Deerweed (*Lotus scoparius*), other *Lotus* species, and lupines (*Lupinus* spp.) are excellent native bee plants which blossom from March through June, and some even stretch into July and August.

In California the dry summer months often provide a dearth of nectar and pollen, although many hearty species in the mint family continue to bloom. *Monardella* species such as *Monardella hypoleuca* and *M. lanceolata*, and various salvias often bloom well into July, August, and beyond, while nettles (*Stachys* spp.) and vinegar weed (*Trichostema lanceolatum*) blossom in September and October. These wildflowers are then followed by blooming native shrubs and trees, which carry their flowers into winter. Sugar bush (*Rhus ovata*) and skunkbush sumac (*Rhus trilobata*) are examples.

Lastly, when planning a native bee garden, be sure to plant the same species in clumps of more than four feet in diameter. Large clusters of the same blossoms act as a neon sign to bring in pollinators.

If this seems an overwhelming amount to consider, don't worry. A visit to your local native plant nursery and to websites such as *www.xerces.org* will guide you to beneficial plant choices much as flowers guide bees to their nectar.

Meghan Walla-Murphy has undergraduate degrees in biology and Asian history, a master's in nonfiction writing, as well as a background in medicinal and edible native plants. She currently works as a freelance writer and lives in the Santa Monica Mountains, and recently joined the Channel Islands Chapter.

SAVE*



$6 off Pacific Horticulture subscription
$4 off Bay Nature subscription
10% off at nurseries and garden stores
$100 off a garden design consultation
$3 off classes, talks, and tea lunches
10% off an environmental consultation

Find out how your CNPS membership can save you money. Join/renew today.

www.cnps.org/membership

* at participating nurseries, stores, and organizations as listed at www.cnps.org/membership

Next Chapter Council Meeting

(Details available at: *http://cnps.org/cnps/admin/cc/*)

SEPTEMBER 10–11, 2011—SAN DIEGO
HOST CHAPTERS: SAN DIEGO AND ORANGE COUNTY CHAPTERS
THEME: CONSERVATION

CALIFORNIA NATIVE PLANT SOCIETY BULLETIN
2707 K STREET, SUITE 1
SACRAMENTO, CA 95816-5113

The California Native Plant Society is a statewide, nonprofit organization of amateurs and professionals with a common interest in learning about and preserving California's native plants and plant communities. Membership is open to all. Visit cnps.org

Printed on 50% recycled paper containing 25% post-consumer waste, processed chlorine-free.

Member of EarthShare California

NONPROFIT ORG
U.S. POSTAGE
PAID
A.M.S.