CEDROS AND GUADALUPE ISLANDS: PACIFIC COAST ISLANDS WITH DIVERSE AND UNIQUE SPECIES AND HABITATS

by Tom Oberbauer

Isla Cedros is the largest of the California and Baja California Islands. While it lies within an arid climatic region where the lowland seasonal rainfall is only 85 mm (3.3 inches), it contains stunningly sharp environmental gradients at elevations up to 1,194 m (3,917 feet). This has resulted in presence of diverse vegetation community associations, from the Baja Californian sarcocaulescent desert, made up of succulent-stemmed trees and shrubs, to coastal sage scrub, chaparral and maritime pine forest typical of southern and central California. The fog enhanced climatic conditions causes the gradient between the pine forest and desert to be particularly steep. The island supports approximately 230 native taxa with some representing a flora from the north, a number representing a flora from the south, and roughly a dozen may be endemic.

Isla Guadalupe was discovered in 1602. Seal hunters and mariners released goats onto the island in the early 1800’s. The goats ravaged the vegetation for nearly 200 years growing in population to nearly 50,000 animals. Their impacts resulted in the extinction, extirpation and near extinction of species of plants and several endemic varieties of birds. It appeared that all hope was lost until a cooperative effort between several agencies in the Mexican Government and conservation groups worked over a period of six years to remove all the goats from the island. The vegetation has begun to show signs of natural recovery. Shrubs that had not been seen in more than 100 years have appeared in open lands indicating that even after 100 years, a seed reserve still resides in the eroded remnants of the soil. While much of the vegetation has not yet assembled itself into real community associations, its reestablishment appears promising. With the growth of vegetation, there are new challenges including the issue of fire. With appropriate management, the vegetation appears to be growing back at a rate that is greater than what would be expected.

Come to the meeting and enjoy these two fascinating islands through Tom’s excellent photographs!

7:00-7:30: Browse books, get a native plant identified, enjoy refreshments, and find out how you can become more involved.

7:30-8:30: Business meeting and presentation. Chapter meetings are open to the public and are free. They are held the third Tuesday of each month (except August) in the Casa del Prado Room 104, just west of the San Diego Natural History Museum in Balboa Park.

BOTANIZING: THE CHAPARRAL

As with everything else biological, San Diego County contains a diverse set of vegetation communities collectively referred to as chaparral. In the Holland based vegetation community concept, 21 different types of shrub vegetation constitute chaparral; however, in the new Manual of California Vegetation, 32 different types of vegetation alliances fall under the chaparral concept.

The diversity of shrubs that make up the basic structure of chaparral in San Diego County is quite amazing. Eleven species and varieties of manzanita (including species of Arctostaphylos and Xylococcus), 15 species and varieties of wild lilac (Ceanothus spp.), 8 types of scrub oaks (Quercus spp.), and chamise (Adenostoma fasciculatum) and red shank (Adenostoma sparsifolium) are the most common indicators of chaparral.

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PRES SEZ

As a child of the 60s, it’s strange to realize that now I’m on the wrong side of the generation gap. The world has shifted under my feet, and a new linked-in world has emerged. Although I write these words on a laptop in the Maui airport, I am kind of a stranger in the brave new world of iPhones, social networks, and wikis. And if you’re a chapter member, it’s likely that you are in the same boat – CNPS shares the same demographic as opera: educated, older, whiter. Can we remain relevant and effective in the 21st century?

I think the internet is both the model and the means for us to move forward. The internet is a diffuse, distributed network where any level of participation is possible. Could we use the power of this technology to distribute responsibilities and tasks among many members working towards a shared goal? A few of our committees are making strong moves in this direction, notably Conservation, where the work of researching and responding to environmental issues can be shared, and Outreach, where the planning and logistics for events are a group effort. This requires the Chair to invest time communicating and coordinating, but pays off in a shared sense of participation and increased experience for potential new leaders. To do this requires Chairs to invest in training and communicating with the group and for members to do their tasks. In the short run, the attitude “The only way it’s gonna get done right is to do it myself” may be easier, but in the long run this is a recipe for stagnation.

This kind of cooperation requires a level of understanding and trust that just doesn’t develop in committee meetings. I’ve heard it said that people must interact at least three times in a social setting to really be able to work together effectively. This is why I have championed a summer camping trip (in 2009; 3 participants), providing different foci for conversation before the meetings, and social meetings in August and December. My hope is that if we get to know each other, we might like each other and enjoy the idea of working together. I’m not sure if this is actually true; some say that we are all into plants because we are not into people, but I hope we could give it a try. First, come to a monthly meeting, especially if you are in a position of leadership. Then treat the pre-meeting as a cocktail party, mingle, chat, find someone with a common interest. Maybe you’ll decide you want to become part of a team and work together to advance our goals.

~ Dave Flietner, Chapter President

BOARD MEETING

The next Board will meet on Wednesday, September 1 at 6:30 at the San Diego Audubon office at 4010 Morena Boulevard, Suite 100. From the I-5, exit Balboa east and turn north on Morena. Board meetings are always held on the first Wednesday of the month.

BOARD NOTES

At the July 7 Chapter Board meeting, no action items were on the agenda. Mike Kelly reported that the next CNPS Chapter Conservation Meeting would be held in San Diego on Jan 14-18, 2012. There will be three days of seminars and two of workshops. CNPS Chapter V.P. Kay Stewart volunteered to be Chapter liaison for this event. The San Diego County tree removal program was discussed. County still wants to remove dead, dying and diseased trees within 500 feet of evacuation routes and homes. CNPS has grave concerns regarding ecological damage from removal of felled trees. Written comments will be submitted before the July 30 deadline. CNPS state is promoting a Native Plant Week, a one week public outreach effort every April. California Assembly approval would be required. Outreach Chair David Varner will be asked to initiate a program to lobby state assembly members for legislative approval.

~ Tom Beltran, Secretary

Ray Donald Feiock

12/31/30 ~ 06/15/2010

Ray Feiock died June 15, 2010 from cancer. As Marketing VP of his own company, he also found time for gardening with native plants, photography and other internet ventures. Ray will be missed, for he was a good man with a quick wit and love for everything. He leaves behind a wife, three children, and five grandchildren. In lieu of flowers, memorial gifts may be given to: California Native Plant Society - San Diego Chapter, P.O. Box 121390, San Diego, CA 92112-1390 (www.cnpssd.org); or Scripps Green Hospital (specify cancer research) (www.scripps.org), 10666 N. Torrey Pines Rd., La Jolla, CA 92037; or Pomerado Hospital (www.pph.org), 155615 Pomerado Rd., Poway, CA 92064.
EDUCATION

CNPS EDUCATION GRANTS PROGRAM

Each year the CNPS Educational Grants program receives funding to help support field research related to California’s native plants. Students, CNPS members, or postdoctoral botanists are eligible, in that order, for grants that are generally not more than $1,000. Proposals should involve taxa or plant communities that are of concern due to direct or indirect potential impacts. The grants need to be relevant to our conservation mission. Certain small endowed funds are available specifically for graduate students planning research involving rare plants or evolutionary botany.

If you are interested in obtaining support from CNPS for your work, request a copy of the guidelines (for drafting and submitting a proposal) from the state CNPS office. Requests for this or other information can be directed to Chair, Educational Grants Committee, 2707 K Street, Suite 1, Sacramento, CA 95816-5113. Completed proposals must be received in the CNPS office no later than September 30, 2010.

~Joan Stewart, Chair
CNPS Educational Grants Committee

CONSERVATION

San Diego’s stormwater EIR update: The issue will be ultimately be decided by the SD City Council. We are working with other environmental groups to modify the program to something environmentally benign and less costly. The current proposal is to clear the channels so that everything flows straight into the ocean, which is bad for the plants ripped out, bad for the quality of the water flowing in the channel, and bad for anyone downstream or along the coast.

~ Frank Landis, Conservation Committee

CNPS 2012 Conservation Conference
Conserving and Restoring the Roots of California’s Richness
January 13-15 with workshops Jan 16-17, 2012
Town and Country Hotel, San Diego

CNPS is recruiting volunteers to help on the Arrangements Committee for the 2012 Conservation Conference. Volunteers from San Diego are needed! CNPS is planning to add a public education day with field trips, workshops, and children’s programs for this conference, and is planning to host a Science Café, art and photography contests, and poetry reading. A range of student events will be offered. The conference will be followed by two days of workshops (January 16-17) on a wide variety of topics. The Call for Abstracts will go out in early spring of 2011. Up to date information and opportunities will be posted on the conference webpage at: http://cnps.org/cnps/education/meetings.php.

TECOLOTE CANYON MONTHLY WALK

September 5. 9:00-11:30 a.m. Kay Stewart will lead this walk. Meet at the Tecolote Canyon Nature Center, at the end of Tecolote Road, past all the ball fields. The walk is repeated the first Sunday of every month, therefore: , October 3, November 7, etc.

RARE PLANT SURVEYS

Here’s the semi-final total: 32,948 thornmints, counted on eleven sites in 2010. By the time this comes out, there will be a much more detailed report available from Frank and pictures posted online, with a link at www.cnpssd.org.

Anyone who is interested in the 2011 rare plant activities should get in touch with me. It looks like 2011 will be a time to try something different. If you have ideas and opinions, let us know. There will be a meeting later this fall to put the plans in place for 2011.
Also, there are copies of the Sixth Edition of CNPS’ Inventory of Rare and Endangered Plants of California looking for a new home. If you think one of these would look good on your shelf, contact me.  

~ Frank Landis, Rare Plant Surveys Chair

**PUBLIC OUTREACH**

We are ready to plan for the Fall so please get in touch if there is an event in which you want CNPS involved or if you want to get involved yourself! Please contact me.  

~ David Varner, Public Outreach Chair

**FALL PLANT SALE — OCTOBER 16**

Our fall plant sale will be **Saturday, October 16**, at the courtyard next to the Casa del Prado, across from the west entrance to the Natural History Museum in Balboa Park. CNPS members are invited to pre-order your plants and have them waiting for you! Instructions on pre-ordering will be posted on our website AFTER September 15th. 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  
- **Volunteer the day of the sale**: We need lots of helpers from 7:30 am until 4pm.  
- **Before the sale**: We need a few volunteers the Wednesday or Thursday before the sale to help tag plants, about 4 hours of your time.

If you can help, please contact the Plant Sale Committee at plantsale@cnpssd.org.

**GARDENING MEETING**

**Wednesday, September 15, 6:30 p.m.** It’s fall and time to regroup and get moving again. We have a lot of irons in the fire, but little real achievement to date, so it’s time to evaluate and map out the way forward. Let’s meet on at 4996 Mt. Almagosa Dr. (at the corner with Mt. Blackburn). We’ll order pizza. Newcomers, from interested amateurs to seasoned pros, are welcome.  

~ Dave Flietner, Gardening Chair

**NORTH PARK COMMUNITY RESTORATION GARDEN**

**Saturday, October 2, 9 a.m.** The CNPS Gardening Committee is embarking on an exciting new project: a combination native garden and plant restoration on a site bordering Juniper Canyon in North Park. We welcome all volunteers and neighbors who are interested in learning about the local habitat and how to use local native plants in their gardens. Be prepared for work outside to help prep the site and eventually to install plants. We will park and meet at the intersection of Petra Place and Petra Drive off of Pentuckett. If you have any questions or you are interested in helping to get this project underway but can’t attend, please feel free to contact me at 619-846-0585, or weshudson@cox.net.

~ Wes Hudson

**GARDEN PHOTOS NEEDED**

The Public Outreach Committee is compiling a photo book of beautiful California native gardens for display at our events. We will give photo credits and landscaping credits for each photo. If you have examples of your garden or your work that you are willing to share, please send digital copies to Margy Day at margyday@gmail.com.

**NATURALLY IN SAN DIEGO**

**San Diego Horticultural Society (SDHS), September 13, 6 – 9 p.m.** "Naturally in San Diego: Plants of Torrey Pines State Reserve," a talk by Dr. Margaret Fillius on native plants and their habitats at Torrey Pines. Surfside Race Place, NE Fair Grounds, Jimmy Durante Blvd, Del Mar. SDHS members are free; non-members, $10 at the door.

The talk will feature annual and perennial natives from the world-renowned reserve, with a focus on their garden uses. Her recently-published third edition of her book, "Native Plants - Torrey Pines State Reserve and Nearby San Diego County Locations" will be available for purchase and for the author to sign. CNPS will staff an information table at the meeting and will provide a selection of 15-20 one-gallon native plants for SDHS's raffle. These meetings are lively, with hundreds of attendees and dozens of tables with books, plants, ornaments, and other products for the landscape. If you want to volunteer to assist at the table or have grown some native plants you would be willing to donate for the raffle, please contact Kay at: vicepresident@cnpssd.org.
(Botanizing: The Chaparral continued)
During spring following a wet winter, chamise (French for “shirt” or “undershirt”), often looks like a lace tablecloth was draped over the vegetation. Ceanothus, often referred to as wild lilac, produces various shades of blue flowers but many varieties are white-flowered. When in flower, Ceanothus greggii and some of the other white species produce a wonderful odor like that of warm whipped cream. As most of us know, chaparral is typically evergreen, except that some species, such as chamise, tend to lose some of their leaves during the long, dry summer. However, many of them including the manzanitas (Arctostaphylos spp.), scrub oak (Quercus berberidifolia), and Ceanothus spp. can be considered evergreen, though even the Arctostaphylos will lose their leaves if subjected to really severe drought.

In San Diego County, chaparral occurs in a somewhat bimodal distribution. In the northern and central portions of the County, it grows along the coast, but is replaced in the interior valleys by coastal sage scrub vegetation, then appears again in the foothills. A number of the foothills composed of gabbro or black granite rock support a unique form of chaparral due to the high concentrations of iron and magnesium in the soil, and metamorphosed volcanic rock that is highly acidic. There, chamise is augmented on the gabbro soils with Parry’s tetracoccus (Tetracoccus dioicus), and in some locations with Dehesa beargrass (Nolina interrata) or peninsular beargrass (N. cismontana), and on gabbro and metavolcanic rock with mountain misery (Chamaebatia australis) and other rare species of plants including Otay manzanita (Arctostaphylos otayensis) and Otay ceanothus (Ceanothus otayensis).

More than 920,000 acres or 34% of the 2.7 million acres of San Diego County are classified as chaparral. However, this is down from an estimate of 41.2% of the County prior to development. Over the years, there have been losses of chaparral and as one would expect for this diverse County, not all of the chaparral community types have been affected equally.

The rarest chaparral community initially described was Holland’s Southern Maritime Chaparral, dominated by chamise, but mixed with Del Mar manzanita (Arctostaphylos glandulosa ssp. crassifolia); Nuttall’s scrub oak (Quercus dumosa), the namesake for the City of Encinitas (=little oaks); wart-stemmed ceanothus (Ceanothus verrucosus); and a number of other sandstone and metavolcanic-inhabiting species. This community consists of many patches of habitat, some dominated by chamise, some by manzanitas, some by wart-stemmed

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GARDEN WORK PARTIES

HOI!
Star trek fans, be a star, and trek on over to the Native Plant Garden in Old Town - Be a volunteer and help out on Saturday September 11. It's at 1 pm, so you can sleep in, and if you take the trolley, you'll be right there. If you drive, park in the lot at Calhoun and Taylor Streets, by the Garden. Bring tools to weed, and two hours later, we'll be done, and the day will still be young! The Garden is at Taylor and Congress Streets, the west end of Old Town State Park.

Old Town State Park Native Garden: Saturday, September 11, 1:00 to 3:00 p.m. Rain cancels. Please bring weeding tools, hand pruners, loppers and gloves. A drinking fountain is on site. The garden is located at the western edge of Old Town State Park, across from the Trolley station at Taylor and Congress Streets. Park at the west end of the free State Park parking lot, between the garden and Calhoun Street. This work party is always on the second Saturday of the month.

Point Loma Native Plant Garden: September 4 and 19, 9:00 – 11:00 a.m. Rain cancels. Bring water. No facilities on site. Tools and supplies provided. Always the first Saturday and third Sunday of the month. Email Richard@sandiegoriver.org for more info.

INVASIVE PLANT CONTROL GROUP

September 4. (First Saturday of each month). 9 a.m. to noon. We focus on tools for controlling invasive weeds for the purpose of habitat restoration and fire prevention. We try to touch on all aspects from evaluation and planning, laws and regulations, various control techniques, through to ongoing maintenance. All members are welcome. We schedule once a month but our daily program allows for other times to fit your schedule. Boots, long pants and long sleeves are required; eye protection is optional but recommended. Contact me for meeting place, directions, gate code & further info at invasiveplants@cnpssd.org.

~ Arne Johanson, Invasive Plant Chair
California Native Plant Society
ANNUAL
NATIVE PLANT SALE

Saturday, October 16, 2010
Balboa Park, San Diego
Casa del Prado Theater Courtyard
1700 Village Place
11 AM - 3 PM
Open to CNPS members at 10 AM
Join or renew membership at the Sale

- Native shrubs, trees, flowering plants
- Seeds, books, posters
- Convenient curb-side parking for loading plants
- Friendly, knowledgeable experts to assist you
- Freebies for kids
- More information at www.cnpssd.org

Why Native Plants?
Attract birds and butterflies, save water, and preserve San Diego’s natural heritage!

All proceeds support the San Diego Chapter of the California Native Plant Society, a non-profit organization dedicated to the preservation of native California flora.
ceanothus, and some by Nuttall’s scrub oak, though you often don’t find all three at the same location. Under the California Maritime Chaparral group in the Manual of California Vegetation, Southern Maritime Chaparral might be mapped as several alliances including the *Ceanothus verrucosus* alliance. Many rare and endangered plants occur in this community that has been reduced from more than 20,000 acres to no more than 2-3,000 acres today, a loss of nearly 90%.

Chamise-dominated chaparral originally occurred over much of the coastal terraces and mesas of the City of San Diego and some of the areas now planted with agriculture in northern San Diego County. Mixed chaparral forms have also been affected especially in the agricultural areas but also from land development that has expanded to the east and southern parts of San Diego County. However, it is interesting that major portions of the forest areas burned in the last seven years are now regrowing as chaparral dominated by Palmer’s ceanothus (*Ceanothus palmeri*), so chaparral is expanding its range in the burned areas.

As we enter autumn, much of San Diego County’s vegetation takes on a stressed appearance due to the length of time since the last rain. However, various forms of montane chaparral are sustained by summer rainfall periods. In El Nino years, summer rainfall can be substantial on Hot Springs Mountain, Mount Laguna and the southeastern portion of the County. Some significant rainfall fell in the mountains in early July of this year, but with the cool weather we’ve had recently, summer thunderstorm formations have been limited thus far, yet a flash flood watch was issued for the Oak Grove area the day of this writing.

There is nothing like the scent of a summer rainstorm in the areas dominated by chaparral in the back parts of the vegetation is reinvigorated. While the chamise has dried brown flowers from last spring still clinging to the plants, County, particularly areas dominated by redshank. A week or two after a summer rain shower, the chaparral the manzanitas and oaks appear green and healthy in the mountain areas. Just south of the border in the Sierra Juarez and Sierra San Pedro Martir, where summer rainfall is more regular, the chaparral remains remarkably vigorous and green throughout the fall.

There are many locations in San Diego County to observe chaparral at is best. Some of the prime examples include the Sunrise Highway between Cuyamaca and Mount Laguna, on the overlook east of Alpine on Interstate 8 where it grows in various stages of recovery from the fires of the last decade, along Kitchen Creek Road where the chaparral endemic gray vireo and black-chinned sparrow occur, and at Indian Flats north of Warner Springs.

The Agua Tibia Wilderness Area is another great place to observe chaparral but it is just a shadow of its former configuration of the 1970’s when bigberry manzanita (*Arctostaphylos glauca*) and redshank formed a tree-like canopy 15 to 18 feet tall. It was not unusual to find backpackers who had hung a hammock from their shading branches for an afternoon nap. Its current vegetation is recovering from fires especially the Vail fire of 1989.

Chaparral is a prime indicator of San Diego County vegetation and not just because it covers more area than any other major vegetation class, but because it includes a wide diversity of dominant and associated species.

~ Tom Oberbauer

### Other Events

**Southern California Botanists Symposium**
**October 9, 2010.** Title: Southern California Mountains Botany, You Say Coastal, I Say Cismontane. For more info or to register visit [www.socalbot.org](http://www.socalbot.org).

**Fall Workshops at Joshua National Park.** For a catalog, information, and/or registration, call 760-367-5535 or visit [www.joshuatree.org](http://www.joshuatree.org).

**Cal-IPC Symposium, October 14-16, 2010, Ventura, CA.** Title: Weeds and Wildlife: Impacts and Interactions. A pre-Symposium Field Course will be held on October 13. The symposium will feature sessions examining the challenge of balancing invasive plant management with the needs of wildlife species, organized in conjunction with the Western Section of The Wildlife Society as a follow-up to the 2007 Invasive Plants and Wildlife meeting. Visit [www.cal-ipc.org](http://www.cal-ipc.org) for more information.

### Calendar
- **9/1:** Board Meeting (p. 2)
- **9/4:** Invasive Plant Control Group (p.5)
- **9/4:** Point Loma Native Garden Work Party (p. 5)
- **9/5:** Monthly Tecolote Canyon Plant Walk (p. 3)
- **9/11:** Old Town Work Party (p. 5)
- **9/13:** Naturally in San Diego (p. 4)
- **9/15:** Native Gardening Meeting (p. 4)
- **9/21:** Chapter Meeting (p. 1)
- **9/19:** Point Loma Native Plant Garden Work Party (p.7)
- **9/30:** Grant Proposals due (p. 3)
- **10/2:** North Park Community Restoration Garden (p.4)
MEMBERSHIP APPLICATION

___Student or Limited Income $25; ___Individual $45; ___Family, Group 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.