



CALIFORNIA NATIVE PLANT SOCIETY BULLETIN

How Rare Plants Get Listed

The process for listing a plant in the *CNPS Inventory of Rare and Endangered Plants* is time-consuming, scientific, and credible.

BY AARON E. SIMS AND
ROXANNE BITTMAN

California plants are always in a state of flux due to many factors, including development, population increases, natural events such as storms and fires, and climate change. A species that was flourishing a few years ago may now be endangered, and another that was in danger of extinction may unexpectedly have made a dramatic comeback. Changes such as these in native plant populations are documented in a database called the *CNPS Inventory of Rare and Endangered Plants* (commonly referred to as the *CNPS Inventory* or just the *Inventory*).

The process for adding, deleting, and changing the status of plants in the *CNPS Inventory* has significantly evolved since its beginnings in 1974. For over 25 years, the *CNPS Rare Plant Program (RPP)* took an iterative, book-driven approach to data development and dissemination for the *Inventory*, which resulted in a five- to seven-year span between hard copy editions. This approach involved a tremendous amount of staff time since changes were discussed at in-person meetings that were conducted throughout the state.

In order to streamline the process and hopefully document it better, the RPP, in collaboration with the California Natural Diversity Database (CNDDDB)—a



Many E. Meyer

The stunning Newhall sunflower (*Helianthus inexpectatus*) was added to California Rare Plant Rank 1B.1 in August 2010 following a status review. Only one population of this species exists in the entire world.

program within the Department of Fish and Game that maintains current lists of rare plant and animal species as well as an ever-growing database of GIS-mapped locations for these species—developed a continuous *Inventory* review process.

The first step in the status review process is identifying a potential change. Changes are most commonly identified via requests from professionals and by reviewing recent scientific journal publications. Recently however, many potential changes have come about through the new *Flora of North America* and the revised *Jepson Manual (Second Edition)*, which have also helped to stimulate studies in plant taxonomy and genetic research.

Next, the RPP conducts research of all pertinent information and develops a series of documents that summarize the scientific data and support a recommendation regarding the plant's status. These documents, which are coauthored by the RPP and CNDDDB botanists, are then sent out to professionals via email who have

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Aaron E. Sims

Sand plant (*Pholisma arenarium*), a parasitic herb, was included in the *CNPS Inventory* in the past. Since its listing, however, concentrated survey efforts provided new information and data, which spread more light on its true conservation status and distribution; and it was later found to be too common for inclusion in the *Inventory*.

2011 CNPS Conservation Symposium

Listing petitions, phenology among topics covered

BY GREG SUBA

September's Chapter Council Meeting in San Diego marked the fourth time in six years that CNPS has presented a day-long conservation symposium during our fall organizational meeting. September's event was well attended and provided an opportunity for chapter representatives to engage in robust and in-depth discussions. This year's topics included listing petitions, plant phenology and climate change, general plan updates, and California wetlands policy.

During an all-morning session, attendees heard presentations regarding the degree

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From the Executive Director

State staff visit CNPS chapters

Last September we had the pleasure of presenting the statewide Legislator of the Year award to Senator Noreen Evans for her exemplary record in the California Legislature, and in particular, for her efforts in native plant conservation.

Since Napa is part of Senator Evans' district, we approached Henni Cohen, President of the Napa Valley Chapter, to see if there was an opportunity to make the presentation at a Chapter event already taking place in the area. The date that seemed to work for everyone was September 27, the date Kathleen Chasey had planned to do a workshop on native plants at Skyline Park, near the Martha Walker Botanic Garden.

Henni, Kathleen, and Napa Chapter volunteers graciously made time and



Aaron Sims

State Senator Noreen Evans was presented with the 2011 CNPS Legislator of the Year award in Napa last September. She was cited for her record on environmental protection. Here she receives a Vine Hill manzanita hybrid from Lloyd Chasey of the Napa Valley Chapter. CNPS Executive Director Tara Hansen looks on.

Legislative Staff of the Year award to Susan Little at a Sacramento Valley Chapter meeting at McKinley Park. In June I attended an event in the Forest Deaner Botanic Garden in Benicia, sponsored by the Willis Jepson Chapter. Greg Suba was invited to speak at the Yerba Buena Chapter meeting in November, and has been asked to return for a more in-depth presentation in February 2012.

room for us that evening and the event was a huge success, with at least 50 people in attendance! Several members of our CNPS State Board and staff joined Vern Goehring, Greg Suba, and me for both the presentation and the workshop that followed.

In October we presented the statewide

The state office staff look forward to visiting or presenting at chapter meetings and events around the state in 2012, and we welcome invitations from chapters!

Tara Hansen
CNPS Executive Director

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A Farewell to Tara Hansen

Tara Hansen, who has served as executive director of CNPS since January of 2009, has announced she will be leaving CNPS by mid-February of this year.

During her tenure, Tara transitioned CNPS into a professional, results-oriented organization. Her ability to modernize computerized systems has left CNPS in a better position to handle increased membership and to improve communications with members, donors, agencies, and the public.

While the upgraded systems provide capacity for growth, greater efficiency, and cost savings, Tara's outreach to members

and chapters and her project management skills kept committees like Marketing, Fundraising, Horticulture, and many others active and thriving. Her work will form the basis for more positive results for CNPS in future years.

Tara put her heart and soul into her efforts. She has provided inspiration to me and many other members of CNPS and she will be missed.

Brian LeNeve
CNPS Chapter Council



The California Phenology Project

Citizen scientists are contributing data to help assess climate change

BY LIZ MATTHEWS

Phenology—the study of seasonal biological events, such as the flowering and fruiting of plants and the spring arrival of migratory bird species—is one of the simplest ways to detect the effects of climate change on the living world. Phenological monitoring offers people in all walks of life the opportunity to learn and to practice observational and scientific skills while reconnecting with the rhythms of their local environment.

In order to recruit and to engage California residents in the collection and interpretation of plant phenological data, the National Park Service (NPS), the University of California at Santa Barbara, and the USA National Phenology Network (USA-NPN) established a new statewide phenology monitoring program, The California Phenology Project (CPP).

The CPP has had a very productive first year. With guidance from dozens of California botanists and ecologists, the CPP identified over 60 plant species as high-priority for phenological monitoring in California. These species were selected based upon their ability to encourage public participation, address key scientific questions, and contribute information that could be used in natural resource management of California's public lands. (To see a list of the CPP focal plant species, please visit www.usanpn.org/cpp.)

In its first year, the CPP has been active in six National Park Service units in California, encompassing desert, coastal, and mountain areas: Joshua Tree NP, Golden Gate NRA, Lassen Volcanic NP, Santa Monica Mountains NRA, Redwood NP, and Sequoia and Kings Canyon NPs. At each of these

parcs, the CPP tagged individual plants for phenological monitoring, labeling over 500 individual plants representing more than 20 species. In 2012 the CPP will add to this network of monitoring sites by expanding into the University of California's Natural Reserve System, additional National Parks, and other public lands.

During the 2011 growing season, CPP observers recorded and uploaded phenological observations to the national phenological database managed by the USA-NPN. This data will contribute to the scientific understanding of the effects of climate change on California's flora.



Vegetation ecologists record vegetative and reproductive phenology of greenleaf manzanita (*Arctostaphylos patula*) near a climate station at Lassen Volcanic National Park.

The CPP also produced a wide range of educational materials appropriate for both formal and informal settings, as well as tools to facilitate phenological monitoring in the National Parks (e.g., species-specific monitoring guides, maps of geo-referenced plants, and training presentations).

In an effort to increase the value of contemporary phenological data, the California Phenology Project also aims to discover and document existing phenology datasets for California flora. We are aware of several categories of historical datasets

with phenological information that the CNPS community might have collected, acquired, or have access to. These categories include seed collection records that include the date and location of seed collection, historical photographs repeated at the same location(s), naturalist journals, and wildflower lists with date and location information, as well as many others. If you are aware of any such datasets, please contact the CPP.

As the CPP prepares for the second year of phenological monitoring across California, we seek to engage citizen scientists to aid in observing phenological events. We hope to work with many plant enthusiasts in the CNPS community, and

the six pilot parks are eager to include CNPS volunteers in their monitoring efforts. To get involved at your local CPP monitoring sites, or to establish *new* sites in the statewide monitoring network, please contact Liz Matthews (matthews@lifesci.ucsb.edu) and visit the CPP website (www.usanpn.org/cpp) to learn more.

Liz Matthews is a postdoctoral associate at the University of California, Santa Barbara, and works with the California Phenology Project.

Brian Heggerly



CHAPTER NEWS



REDBUD CHAPTER:

Protecting a Sensitive Plant Community

Over the past two years the Redbud Chapter has been dealing with the protection of a sensitive plant community in our area of the northern Sierra Nevada foothills. This sensitive area is on the edge of the Nevada County landfill south of



Karen Callahan

The federally listed plant Stebbins' morning glory (*Calystegia stebbinsii*) with pale swallowtail butterfly.

Grass Valley, and surrounds an animal shelter and new county animal control offices. The federally listed rare and endangered species, Stebbins' morning glory (*Calystegia stebbinsii*), occurs in the area.

Back in 1990 when CNPS informed the County about the rare plants at this location, fencing and signs were installed to protect them. In 2004 CNPS notified the County of some new rare plant populations.

The gabbro soils near the local county animal shelter form a distinctive chaparral that includes a possible new *Carex* species; Mother Lode yampah (*Perideridia bacigalupii*, CNPS list 4); Sanborn's onion (*Allium sanbornii* var. *sanbornii*, CNPS list 4); and MacNab cypress (*Hesperocyparis macnabiana*) and flannelbush (*Fremontodendron californicum*), both locally uncommon, as well as more common species.

When the County installed the new offices in June 2010, it failed to properly implement CEQA—which specifically prohibits the use of any exemptions when a discretionary project would impact a listed species—or to take normal protection measures. As a result, extensive land leveling activities damaged sensitive plant populations. The Chapter had to remind the County, after the fact, of the presence and locations of existing listed plants.

In March 2011 the County gave CalFire permission to use an adjacent 40 acres for controlled burn training in the early spring, during the germination and budding time of the rare plants. Five Redbud members participated in two days of field surveys with a Department of Fish and Game biologist. The chapter then succeeded in getting CalFire personnel to change the timing of their training exercises. 🌱

E. William Wilson and Karen Callahan
Redbud Chapter

NAPA VALLEY CHAPTER:

Two New Partnerships Bring In Members

The Napa Valley Chapter, although small, recently has been successful in increasing its membership through creative partnerships.

The chapter became one of the sponsors of the City of Napa Water Department's semi-annual Water-Wise Landscaping Series. Members of the Napa Chapter hosted each of the four workshops in the series, staffing an outreach table and offering native plant giveaways. The final workshop was taught by a chapter member, and featured low-water-use California native plants that work well in Napa gardens.

A second new partnership was developed with the Napa Resource Conservation

District (RCD). The Chapter worked with the RCD to bring the Bay Friendly Garden Tour to the Napa Valley for the first time. Members of the board worked with the RCD to recruit both gardens and volunteers. The Chapter also staffed an outreach table during the tour at the Martha Walker California Native Habitat Garden, a three-acre garden under the care of the chapter. To participate in the tour, participants had to sign up at the CNPS table there.

The Chapter also continued its outreach activities at Earth Day, farmers markets, and at events sponsored by Sustainable Napa Valley. Together with its spring and fall plant sales—which offered CNPS members



Kathleen Chasey

CNPS Member Lloyd Chasey staffs an outreach table at a Sustainable Napa Valley Event.

a 10% discount and early plant selection as incentives, along with the grand prize of a garden design consultation—all of these activities have resulted in new and renewed memberships. 🌱

Kathleen Chasey
Napa Valley Chapter

Raffles and the Law

Though you wouldn't know it with all the lottery ticket dispensers, the State of California has a constitutional prohibition against gambling and lotteries. Exceptions and exemptions to this can and have been made by the state legislature. For example, charities and certain other private non-profit organizations may conduct raffles to raise funds for beneficial or charitable purposes in the state.

What organizations qualify and how the raffles must be conducted are governed by Penal Code 320.5 and are under the purview of the State Attorney General. Yes, a Penal Code!—and a rather onerous set of reporting requirements including a financial report required for each and every raffle.

Since the California Native Plant Society and its 33 chapters only receive nominal financial income from raffles, I have been reviewing what our options and obligations are as an organization. Remember that CNPS is a single nonprofit corporation and what goes on in any chapter affects the corporation as a whole.

The key to CNPS and its chapters continuing to hold raffles is found in the exemptions section of law. Penal Code 320.5(m) exempts CNPS from registering and reporting requirements provided that the following three conditions are met for each raffle:

- It does not require anyone to pay for a chance to win.
- There is a general and indiscriminate distribution of tickets.
- Free tickets have the same chances as tickets for which a donation is given.

The bottom line is that as long as you are giving away some of the tickets, not requiring payment, and simply asking for donations, your chapter raffles are within the law and exempt from Penal Code 320.5.

Please do not hesitate to contact me if you or your chapter have questions about raffles. 🌿

Carol W. Witham
CNPS Treasurer

In Appreciation: Sue Britting

Two decades of service to CNPS

Sue Britting is a friendly, familiar face to many in CNPS. Her involvement in CNPS over the past nearly 20 years reads like a directory of CNPS positions and titles: CNPS Fellow, CNPS Board Member, CNPS Board President, major donor, Chapter Council delegate, interim Executive Director, Conservation Committee member, Litigation Committee member, El Dorado Chapter President, Chapter newsletter editor, Chapter conservation chairperson. This isn't even a complete list. Some people who have done so much volunteering for such a diverse and passionate organization would get burned out, but Sue continues to be one of CNPS's most dependable volunteers.

Sue's involvement started at the chapter level. The El Dorado Chapter was just forming around 1993 when she was working for the U.S. Forest Service as a botanist. New to the area, but encouraged

by the number of people she knew who were getting involved with the chapter, she joined. George Clark, past CNPS President, encouraged Sue to become the



Sue Britting

Stealing some time to relax, Sue enjoys the wild and peaceful landscape around Van Vleck Meadow near the Desolation Wilderness Area.

chapter conservation chair, and the rest, as they say, is history.

Sue claims that she does not have a favorite role or activity, and that all her activities in CNPS are “just a part of my personal desire to protect native plants and the environment. All of the jobs were about me giving something of myself. At the same time, I was able to learn more about native ecosystems and how to work with people toward a common goal. For me, the challenges and the rewards have been outstanding.”

We are truly indebted and grateful for the nearly two decades of remarkable service Sue Britting has selflessly given to CNPS. Of CNPS, Sue says, “The people are extraordinary and the cause righteous.” One could easily say the same about Sue. 🌿

Stacey Flowerdew
Membership and
Development Coordinator

How Rare Plants Get Listed (from page 1)

agreed to participate in a Regional Plant Status Review Group, and their comments are posted to the Rare Plant Status Review Forum. There are currently 335 people included in Review Groups that receive status review emails, and approximately 185 of them that are also members of the Rare Plant Forum, and the number of reviewers is increasing.

This new process is conducted entirely through the Internet, along with email and phone communication. Although it lacks the personal connection we used to get from in-person meetings, it gains a lot of credibility from being well-documented, well-commented, and from following a logical set of steps.

One recent example that may help illustrate the value of the current status review process is the recent addition of the Newhall sunflower (*Helianthus inexpectatus*) to California Rare Plant Rank 1B.1. This spectacular 20-foot tall sunflower, which was first discovered in 2002 and is only known from a single population in the

entire world, contains fewer than ten individual plants! For such a large and spectacular sunflower to go unnoticed in California for so long is truly amazing. Although this plant was obviously very rare and highly threatened, it still went through the full review process outlined above before it was added to the CNPS *Inventory* and CNDDDB. This is the case for all plants that are proposed for status, no matter how obvious the status may seem.

Finally, although the past methodology was an excellent way to gather information and expert opinion on proposed changes, the new method deals better with such things as high volumes of changes, and changes that may need to be made in a shorter period of time. The new process is also very easily defended as a solid scientific process to any challenges that may occur, since there can be no question about what commenters actually said (it's written down) and what their recommendation is regarding the proposed change.

Also, the new electronic process makes

it easier for people to contribute their data, since they are not dependent on in-person meetings where conflicting schedules could result in spotty attendance.

To learn more about the Newhall sunflower, please visit its profile in the new online *Inventory*, 8th Edition (www.rareplants.cnps.org). Also, please don't hesitate to contact Aaron Sims (asims@cnps.org) to learn more about the CNPS Rare Plant Program and status review process, and Roxanne Bittman (rbittman@dfg.ca.gov) to learn more about the CNDDDB.



Roxanne Bittman

Aaron Sims



Aaron Sims

Roxanne Bittman

Aaron Sims is CNPS rare plant botanist and manages the CNPS Rare Plant Program. **Roxanne Bittman**, long-time botanist at the CNDDDB, is now its coordinator.

Symposium (from page 1)

of scientific rigor and conservation merit that needs to be considered for a successful listing petition. Based on the information presented and discussed, the CNPS Conservation Program—in coordination with members of both the Rare Plant Program Committee and the Conservation Program Committee—will be drafting guidelines for the development of listing petitions submitted by CNPS to state and federal agencies. This document will then be sent to the Chapter Council for review and input.

In the afternoon, symposium attendees heard a presentation on a California statewide effort to monitor phenological changes in plant populations, and to

correlate these with changing climate conditions. CNPS Conservation Program Director Greg Suba will follow up with representatives of the California Phenology Project (CPP) and the San Diego Phenology Project to identify opportunities for CNPS involvement in these efforts. CNPS chapters are encouraged to explore how current CPP goals and survey protocols might translate into specific projects. Currently CPP monitoring occurs only within a few National Parks pilot areas.

The conservation symposium also included a refresher “crash course” on how city and county General Plans represent the strongest nexus between local land-use regulations and plant protection, and stressed the importance of CNPS chapters

weighing in on these plans as they are crafted. (This topic was covered in greater depth during the 2006 CNPS symposium held in Arcata, CA.) This year's symposium concluded with a presentation describing the status of ongoing efforts by the State Water Resources Control Board to update California's wetland policy, in order to assume the administration of wetlands regulation in California from the U.S. Army Corps of Engineers.

The agenda, presentations, and handouts from September's conservation symposium (and for all previous years' symposiums) are available at www.cnps.org under Conservation/Conservation Resources.

Greg Suba is director of the CNPS Conservation Program.

Good Habitat Attracts More Than Just Pretty Butterflies

BY BARBARA EISENSTEIN

There is a rustling in the shrubs. Bending down I see a lizard doing battle with a large beetle. It is vigorously shaking its head, the beetle splayed out in its mouth. This is material for a wildlife documentary, and it is happening in my own yard. There is drama in my garden. There is probably drama in your garden too, unless your yard is covered with lawn, nearly devoid of life, diversity, and habitat.

Often the move towards habitat gardening begins with the desire to attract butterflies, hummingbirds, and songbirds. Initially, we may add colorful flowers to invite pollinators, yet avoid less showy plants that provide food for caterpillars. In fact, the sight of a partially consumed leaf may be considered a garden flaw.

Although birds and butterflies provide good incentive to remove lawn and increase diversity, good habitat requires more. Good habitat will have the following elements, necessary to support a complex web of life:

- Food for adults and their young (larvae). Keep in mind that timing matters since the life cycle of animals varies according to their specific adaptations to their environment. Plants not only feed butterflies and hummingbirds, but also a myriad of insects that in turn nourish many other animals.
- Water is critical for good habitat. Animals get water from cupped flowers, succulent stems, and dew caught in the hairs of a leaf, as well as from fountains and other water features.
- Shelter from predators and the weather is another important function of plants. Do not be too quick to tidy up the garden since “messy” spots often provide the best protection.



Left: A robberfly rests on a toyon leaf (*Heteromeles arbutifolia*) in author's garden. Right: After subduing its prey, a lizard carries a beetle to a safe location.

- Nesting places and materials are needed for animals to succeed. Branches, leaves, and even spider webs furnish the materials and places for animals to raise their young.
- Roosting sites offer a safe vantage point for birds to observe their surroundings, so make sure you have some height in the garden, and think twice before removing dead branches.

Although some animals and insects are generalists who can live in a wide range of conditions, most have adapted over a long period to a specific ecosystem. These specialists require the native plants with which they evolved. According to Douglas Tallamy in his pivotal book, *Bringing Nature Home*, two studies (Flanders et al. 2006, and Lloyd and Martin 2005) suggest that substituting non-native plants for natives can lead to declining bird populations. Surely the alarming rate of extinction argues for serious efforts to restore habitat both in wild lands and in our home gardens, and it seems obvious that native plants make the best habitat.

In attempting to create habitat in our gardens, one may despair over the complexity of nature. Lists of plants

that are required for specific species of butterflies can be overwhelming. Rather than over studying the subject, let nature guide you. Try to determine what grew and lived in your locality before the land was developed and go from there. Much of coastal California was coastal sage scrub. At higher elevations, chaparral dominated. Some areas supported magnificent coast live oak woodlands. In selecting plants, choose from the wide variety of natives local to your area to support the rich diversity of life that once existed there.

As your garden settles in, be sure to take time to observe and enjoy the living things that share the land with you. The life and death struggles we watch on television pale in comparison with the marvels that can be seen in our own gardens.

Barbara Eisenstein is a native plant garden writer, consultant, and enthusiast. When not working in her own garden or in the South Pasadena Nature Park, she may be found updating her website: www.weedingwildsuburbia.com.

Both photos by Barbara Eisenstein



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

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