over 50 years ago (1965) the California Native Plant Society was formed...
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<tr>
<th>Number</th>
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<td>24a</td>
<td>N. Santa Barbara subchapter</td>
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<td>25</td>
<td>Kern</td>
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<td>26</td>
<td>Channel Islands</td>
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<td>27</td>
<td>Los Angeles - Santa Monica Mtns.</td>
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<td>San Gabriel Mtns.</td>
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<td>Riverside - San Bernardino</td>
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<td>South Coast</td>
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<td>33</td>
<td>Mojave</td>
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<td>34</td>
<td>Baja California</td>
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</table>
5 statewide programs of CNPS:

• Conservation
• Education
• Gardening/Horticulture
• Vegetation
• Rare Plants

Also chapters, webmaster, publications, communications/marketing, and admin staff

All based out of Sacramento (except chapter staff)
over 50 years ago (1965) the California Native Plant Society was formed...
over 50 years ago (1965) the California Native Plant Society was formed, with a dedication to protect California’s native flora and to preserve it for future generations...
Three years later (1968) legendary botanist and geneticist Dr. G. Ledyard Stebbins began compiling a list of plants having a distribution of less than 100 miles...
This original and important attempt to document California’s rarity was recorded as a set of 3x5 notecards.

And served as the foundation for the first CNPS *Inventory of Rare and Endangered Plants*. 
Welcome to the Inventory of Rare, Threatened, and Endangered Plants of California

The CNPS Inventory of Rare and Endangered Plants has served as a resource for information about California’s rare plants for over 35 years. The Inventory is a widely-recognized resource that promotes scientific research, conservation planning, and the enforcement of environmental laws. To search for information regarding California’s rare and endangered plants, please click on the "Simple Search" or "Advanced Search" buttons below, or enter a word or phrase directly into the search bar to begin.

Additions / Changes / Deletions
- *Boechera rubicunda* added to 1B.1 on 2011-04-27
- *Atriplex tularensis* added to 1A on 2011-04-20
- *Cirsium occidentale var. lucianum* added to 1B.2 on 2011-04-08
- *Gilia mexicana* added to 2.3 on 2011-04-08
- *Rieles americana* added to 2.2 on 2011-03-24
- *Ptilidiun californicum* added to 4.3 on 2011-03-24
- *Buxbaumia viridis* added to 2.2 on 2011-03-23
- *Thysanocarpus rigidus* added to 1B.2 on 2011-03-17
- *Dudleya virens ssp. hassei* added to 1B.2 on 2011-03-08
- *Asteracanthus hermodendron* added to 1B.2 on 2011-03-17

Currently In Review
- *Calystegia subacaulis ssp. episcopalis*
- *Sweita albomarginata*
- *Pediomelum castoreum*
- *Lycium torreyi*
- *Eriogonum umbellatum var. polyanthum*
- *Chenopodium littoreum*
- *Menodora spinescens var. mohavensis*
- *Fraseria albomarginata var. induta*
- *Lewisia kelloggii ssp. kelloggii*
- *Boechera spongialis*

All Major Changes Since 4th Edition: 2001
CNPS Rare Plant Inventory

- Helps *prevent* plants from becoming State/Federally Listed
- At the same time prioritizes plants that *need to be* Listed

- *Ceanothus maritimus*, 1B.2
- *Cirsium occidentale var. compactum*, 1B.2
- *Calochortus simulans*, 1B.3
- *Bloomeria humilis*, 1B.2
- *Castilleja densiflora subsp. obispoensis*, 1B.2
Rank 4: Plants of limited distribution

Rank 3: Plants about which we need more information

Rank 2B: Plants rare in CA but more common elsewhere

Rank 1B: Plants rare in CA and elsewhere

Rank 1A: Plants presumed extirpated in CA (includes plants now on Rank 2A for simplicity)
Why Conserve Rare Species?

Michael Soulé proposes four core principles to build on:

1. Diversity of organisms,
2. Ecological complexity
3. Functioning evolutionary processes
4. Biodiversity has intrinsic value irrespective of its usefulness to people.

(Bartosh and Andre, *Fremontia Special Issue*, Jan. 2015).
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(Bartosh and Andre, *Fremontia Special Issue*, Jan. 2015).
California sensitive plant taxa relative to all 6500 native plants in the state

~2,300 sensitive plants

65%

~4,200 native, non-sensitive plants

35%
Natural Rarity

A large portion of California’s plants are rare due to limited habitat, and may have always been rare during their evolutionary history, or are currently rare by today’s standards.
Anthropogenic Rarity

A number of California’s rare plants may (or may not) have been more widespread in the past, but are greatly fragmented, restricted, and/or imperiled due to negative interactions with human populations.

© 2010 Chris Winchell

*Suaeda californica*  
CALIFORNIA  
SEABLITE
California
Rare Plants
California Rare Plants

- 2,366 rare plants
  (including 14 lichens)
California Rare Plants

- 2,366 rare plants (including 14 lichens)
- 1,701 CRPR 1s and 2s
- 41,400+ occurrences
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- 1,701 CRPR 1s and 2s
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Kern Chapter
Kern Chapter

- 180 rare plants
Kern Chapter

- 180 rare plants
- 103 CRPR 1s & 2s
Kern Chapter

- 180 rare plants
- 103 CRPR 1s & 2s
- 4 CRPR 3s
Kern Chapter

- 180 rare plants
- 103 CRPR 1s & 2s
- 4 CRPR 3s
- 73 CRPR 4s
• 1,249 occurrences
• 627 recent
• 622 historical
• 627 recent
• 622 historical
• 622 historical
• Comanche Point layia (Layia leucopappa)
A Forgotten Past
Comanche Point layia (*Layia leucopappa*)

- Added to 1B in 1974
- Known from approx. 10 occurrences (5 are historical)
Comanche Point layia (*Layia leucopappa*)

- Between Edison and Bena, southeast of Bakersfield.
- Exact location not known; site mapped to include entire area between Edison and Bena.
- Main source of information for this site is from seed collected by A. Krames in 1935.
Comanche Point layia (*Layia leucopappa*)

• BETWEEN EDISON AND BENA, SOUTHEAST OF BAKERSFIELD.

• EXACT LOCATION NOT KNOWN; SITE MAPPED TO INCLUDE ENTIRE AREA BETWEEN EDISON AND BENA.

• MAIN SOURCE OF INFORMATION FOR THIS SITE IS FROM SEED COLLECTED BY A. KRAMES IN 1935.

• MUCH OF THIS AREA HAS BEEN CONVERTED TO AGRICULTURE
Comanche Point layia (*Layia leucopappa*)

Endemic to Kern County:

- 5 occurrences historical
- 4 from 1935
- 1 presumed extirpated
• 622 historical
• Madera leptosiphon (Leptosiphon serrulatus)
Madera leptosiphon (*Leptosiphon serrulatus*)

- Added to 1B in 1980
- Known from approx. 27 occurrences (only 5 are recent)
Madera leptosiphon (*Leptosiphon serrulatus*)

- TEHACHAPI MOUNTAINS
- ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1935 ANDERSON COLLECTION.
- THIS IS A SOUTHERLY EXTENSION OF THE KNOWN RANGE OF THE PLANT.
Madera leptosiphon (*Leptosiphon serrulatus*)

- TEHACHAPI MOUNTAINS
- ONLY SOURCE OF INFORMATION FOR THIS SITE IS A 1935 ANDERSON COLLECTION.
- THIS IS A SOUTHERLY EXTENSION OF THE KNOWN RANGE OF THE PLANT
- NEEDS FIELDWORK.
Madera leptosiphon (*Leptosiphon serrulatus*)

Known from Mariposa to Kern County:

- 17 of 22 occurrences historical
- 2 from late 1800’s
- 20 over 50 years old

Photos © 2008 Chris Winchell
New Discoveries
Piute Mountains triteleia (*Triteleia piutensis*)

- Discovered in 2010 during botanical surveys
- Described by Ed Kentner and Kim Steiner in 2013
- A prior collection from 2001 was later confirmed

© Jason Brooks
Piute Mountains triteleia (*Triteleia piutensis*)

- Added to CRPR 1B.1 in 2014
Piute Mountains triteleia (*Triteleia piutensis*)

- Added to CRPR 1B.1 in 2014
- Threatened by wind energy development

Piute Mountains triteleia (*Triteleia piutensis*)

- Added to CRPR 1B.1 in 2014
- Threatened by wind energy development
- Most similar to *T. crocea*
  - *T. crocea* is restricted to Klamath and High Cascade Ranges of northern CA and southwest OR

Piute Mountains triteleia (*Triteleia piutensis*)

- Known from only 2 occurrences
Piute Mountains triteleia (*Triteleia piutensis*)

- Known from only 2 occurrences
- Piute Mtns. of southern Sierra Nevada
Piute Mountains triteleia (*Triteleia piutensis*)

- Known from only 2 occurrences
- Piute Mtns. of southern Sierra Nevada

- in openings of Pinyon juniper woodland
- fine volcanic soil throughout scattered boulders or heavy clay with volcanic hardpan
Rosamond eriastrum (*Eriastrum rosamondense*)

- Originally identified as *E. hooveri*
- Described by David Gowen in 2013

Bottom photos 2015 Russell Huddleston
Rosamond eriastrum (*Eriastrum rosamondense*)

- Added to CRPR 1B.1 in 2013
- 8 occurrences, 3 historical
Rosamond eriastrum (*Eriastrum rosamondense*)

- Endemic to small area between Rosamond and Lancaster in Los Angeles Co. and Rogers Dry Lake in Kern Co.
Rosamond eriastrum (*Eriastrum rosamondense*)

- Endemic to small area between Rosamond and Lancaster in Los Angeles Co. and Rogers Dry Lake in Kern Co.
alkali marsh aster (*Almutaster pauciflorus*)

- Added to CRPR 2B.2 two days ago (14 March 2017)
- 2B = rare in CA, but common elsewhere

Photos © 2014 Richard Spellenberg
alkali marsh aster (*Almutaster pauciflorus*)

Ranges from southeast Alberta east to Manitoba, Canada, then south through the western Great Plains to west Texas, Arizona, and Mexico.
alkali marsh aster (*Almutaster pauciflorus*)

- Known in CA from only 10 occurrences
- 7 historical
alkali marsh aster (*Almutaster pauciflorus*)

- 2 occurrences in Kern Co.
- Based on multiple col. by Twisselmann from 1962-63, and a 1962 col. by J.T. Howell
alkali marsh aster (*Almutaster pauciflorus*)

- From Isabella and Scovern Hot Springs
- Is the marsh aster still present?
A CALL TO ACTION

Dieter Wilken, 26 February 2017:

“Although the original wetlands and hot springs south of Isabella are probably diminished since Twisselmann collected there, potential habitat still exists, and some is being actively protected.

An 18 acre site, called the Bob Powers Gateway Preserve, has been established by the greater Kern Valley Audubon preserve system. The site is notable in supporting a rather large population of Calochortus striatus, and Google Earth images suggest that the wetlands and surrounding saline habitats are largely intact.

Obviously, someone simply needs to gain access and search for Almutaster.”
Announcements

• ABSTRACT SUBMISSION DEADLINE: JULY 10, 2017

• Rare Plants Session:
  • 15 talks in 3 session blocks
  • “New Discoveries” sub-session
  • Panel on conservation of cryptic species
Announcements

• CNPS has a $7,500 challenge gift from the Bakersfield Californian Foundation to support *Important Plant Areas* work in the area. Please consider donating so we can take advantage of their generous offer. Get in touch with Dan Gluesenkamp for more info, or have ideas for who we can approach to help. dgluesenkamp@cnps.org
Why Conserve Rare Species?

Rare species:
- Contribute to biodiversity
- Play key ecological roles
- Have evolutionary significance
- May provide medicinal uses
- Are protected by legal regulations
- Can be targets for conservation planning
- Can help protect natural communities as a whole
- Are of concern for one’s environmental ethics and morals
- Are beautiful!!!
Why Conserve Rare Species?

Locally rare species:

- Help contribute to long-term survival of species
- Help preserve the diversity of the species
- Help preserve gene pool of local flora
- Preserve potential for species to undergo speciation events

Clarkia tembloriensis subsp. tembloriensis (Temblor Range fairyfan)