

Mission

The California Plant Rescue (CaPR) collaborating institutions make conservation collections of seeds and living plants to secure high levels of genetic diversity in off-site collections such as botanic gardens and seed banks to safeguard populations in a time of uncertainty. We also gather information about wild populations to ensure a baseline of information is available for future generations.



Volunteer sorting seed. Photo by Sarah Termondt, SBBG.



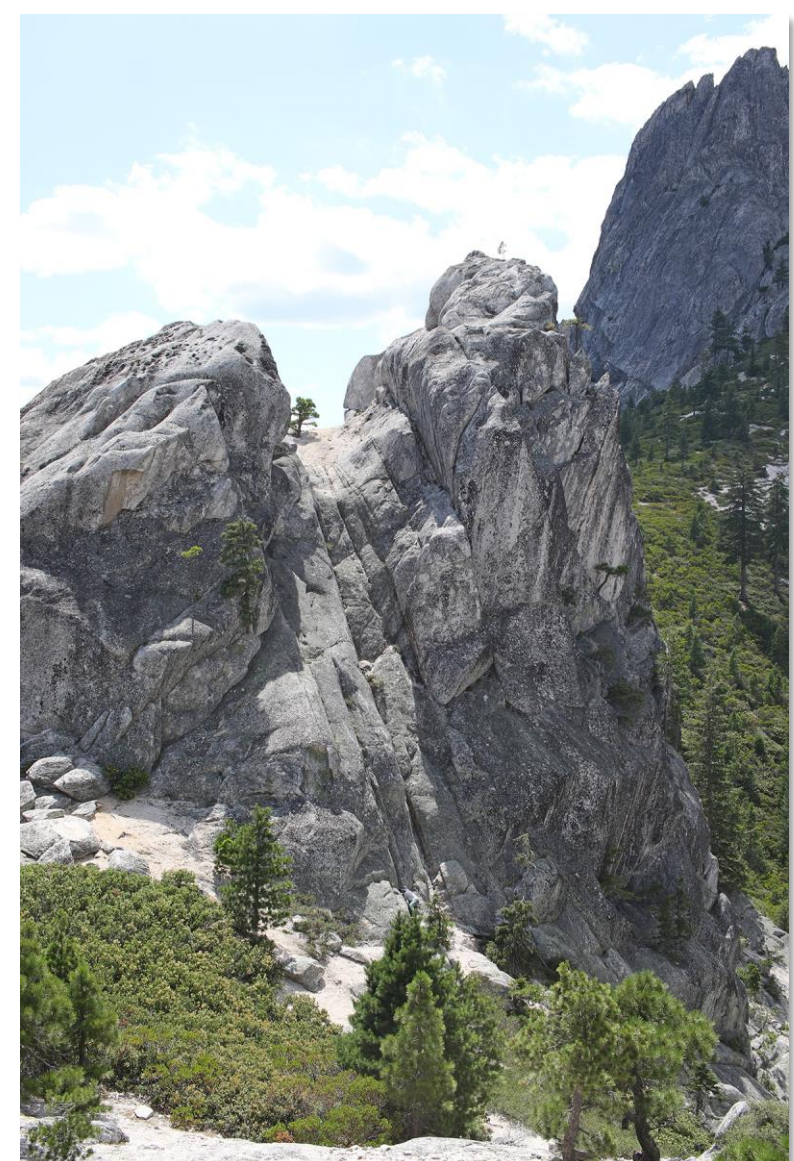
Castilleja mollis seed. Photo by Christine Pang, SBBG.



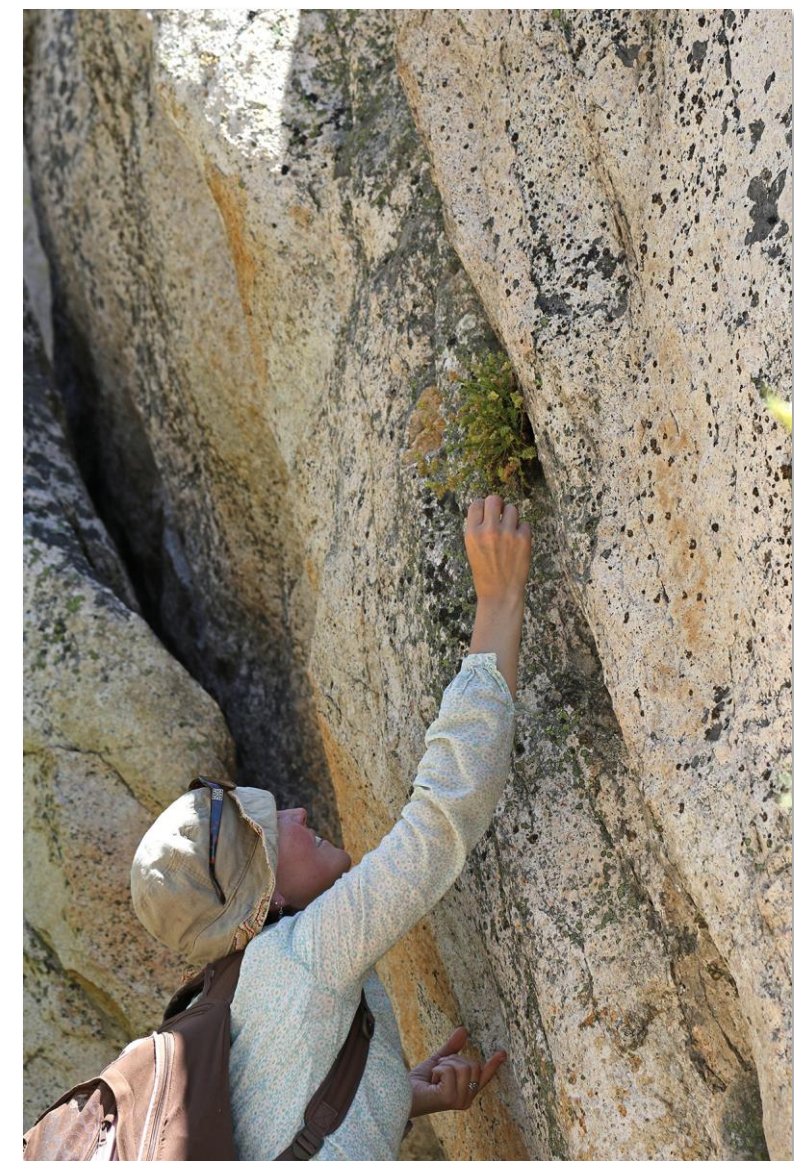
Asha Setty and Lalima Gluesenkamp displaying native seeds. Photo by Dan Gluesenkamp, CNPS.

Goals

Our long-term goal is to secure the entire California flora in conservation collections, with an emphasis on seed banking. For the year 2020, CaPR is actively working to meet the conservation goals outlined in the Global Strategy for Plant Conservation of the Convention for Biological Diversity. Our principal focus is to fulfill Target 5 of the Strategy, which is to secure at least 75% of threatened plant species in secure ex situ, or off-site, collections, with at least 20% available for recovery and restoration programs. Within California, 1,177 vascular plant taxa have been ranked as rare, threatened or endangered in California and elsewhere (California Rare Plant Rank 1B) in the *CNPS Inventory of Rare and Endangered Plants* and form the basis of this target for the state.



Castle Crags, Shasta County. Photos by Aaron E. Sims, CNPS



Merissa Hanisko (left) collecting seeds of Castle Crags ivesia (*Ivesia longibracteata*) (right)



What We Do

CaPR members promote seed banking as part of an *integrated plant conservation strategy*. Major aspects of this strategy are 1) making collections of seed and plant cuttings to store in seed banks and botanical gardens long-term, known as *ex situ* conservation; 2) conducting research and providing material for research on the seeds and plants in our collection in order to inform future conservation efforts; and 3) monitoring wild populations and their threats to better inform *in situ* conservation management needs, which may include enhancing populations with plant material from our collections. We also develop tools, conduct outreach, provide training, and collectively fundraise to support our mission.



Conserving Seed



Monitoring Wild Populations



Sharing Data, Expertise, & Tools



Outreach & Education



Researching Germination & Propagation



Collective Fundraising & Development

Collaborating Institutions



California Plant Rescue:

A Collaborative Program to Safeguard the Diversity of the California Flora

Search Our Conservation Collections

Plant Taxonomy

Species Name

Family

Common Name

Protection Status

Federally Listed?

☐ Yes

California Listed?

☐ Yes

Rare Plant Rank

Select

Collection Info

Species in Collection:

☐

Species Not in Collection:

☐

Collection Type:

Select

Collected by:

Any

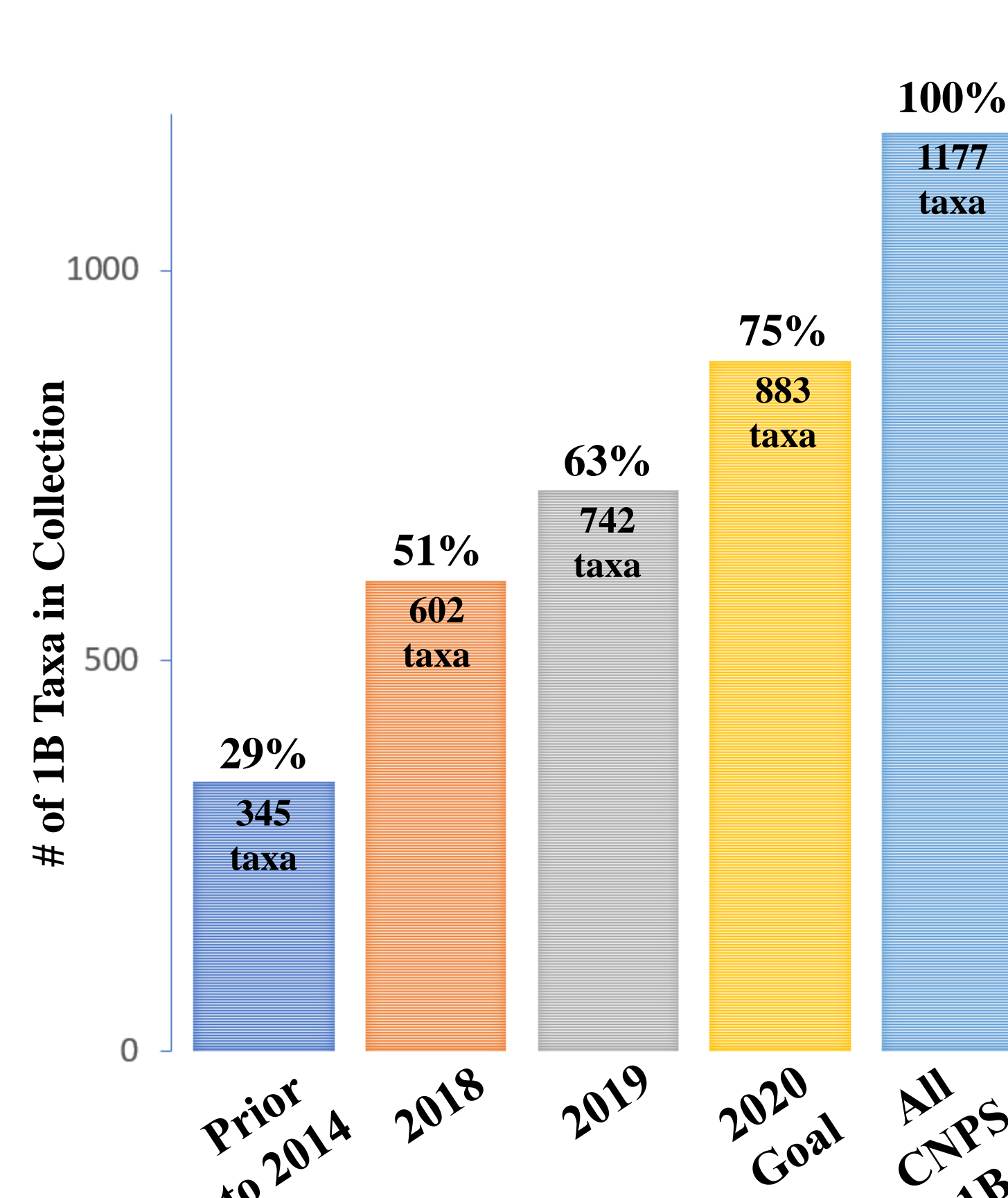
Search



CaPR partners with the California Department of Fish and Wildlife's **Natural Diversity Database (CNDDDB)**, which includes seed collection information in the "Other Status" section of their RareFind 5, BIOS, and monthly GIS data download. CaPR seed info is also soon to come to the **CNPS Inventory of Rare and Endangered Plants**.

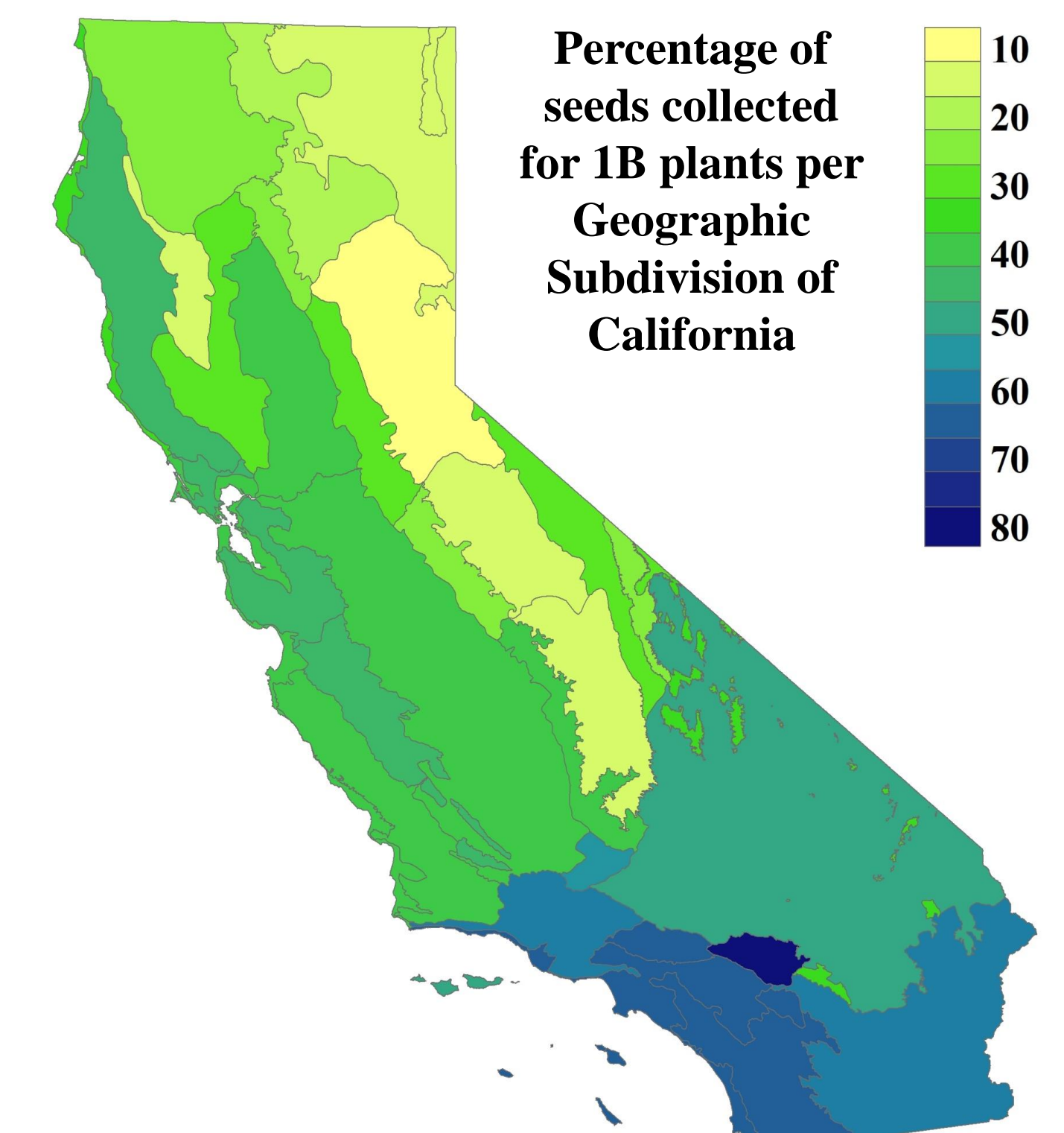


Progress Toward Our Goal



With 63% of 1B taxa already conserved in ex situ collections, securing at least 75% of threatened plant species by the end of 2020 is within reach for California. A significant achievement in one of the world's biodiversity hotspots.

Conservation Collection Hotspots



The above map depicts the concentration of our collection efforts in southern California, with the *San Bernardino Mountains District* (SnBr) having the highest percentage of 1B plant seeds collected at 80%. Regions of northern California and the *High Sierra Nevada* have the lowest concentration of collection efforts, ranging from 10-20% of 1B collections.

Onward for Biodiversity

A Call to Action Across California

CaPR has made great strides towards conserving California's botanical diversity, but there is still much to be done. We are working towards securing more funding, expanding partnerships, conducting workshops, and building our membership and degree of collaboration.

The images below are some of the rare northern California plants that have had their seeds collected and secured in long-term storage as part of CaPR. Photos are by Aaron E. Sims, CNPS, unless otherwise noted.



Raillardella pringlei



Brodiaea matsonii



Fritillaria purdyi (seeds at right)



Leptosiphon nuttallii subsp. *howellii*



Lupinus tracyi



Triteleia crocea var. *modesta* (seeds at right)



Lusetta Sims collecting *Phacelia damnatia* ined. (seeds at right)

Phacelia damnatia ined.

In 2019 Julie Kierstead discovered an undescribed perennial *Phacelia* growing up to 1 meter tall. Extensive surveys led to the discovery of only 8 populations, all within the vicinity of Damnation Peak, Shasta County.



Seeds of the yet-to-be described *Phacelia* were proactively collected by CaPR within the first year of its discovery.

Above center photo by Julie Kierstead.



Toby Seiler (age 9) collecting seeds of Scott Mountains fawn lily (*Erythronium citrinum* var. *roderickii*).