

On February 8, the SCHS went on a botanical journey via Zoom traversing the length of Chile with Paul Mills, the Director of Conservation and Curator of the Living Collections at Lotusland. He has traveled to Chile fairly regularly since 1996 and described the country as a “biogeographic island” due to its extreme landscapes situated between the Atacama Desert in the north, the Pacific Ocean to the west, the Andes Mountains to the east and Antarctica to the south. Much of its flora has developed in isolation and its many endemic plants have made it a popular destination for plant seekers.

Beginning in the northeast, in San Pedro de Atacama, Mills shared dramatic landscapes of the Atacama and its sparse plant life. At 8,000 feet above sealevel, this desert area is home to *Echinopsis atacamensis* and *Azorella compacta*, as well as volcanos, hot springs and salt flats, which are being environmentally damaged due to lithium mining.



Mills' photo of himself behind an enormous *Copiapoa dealbata*.

Plants growing in the Atacama at sealevel are dependent on fog-drip for their survival. Pan de Azucar National Park boasts the endemic *Copiapoa* genus, as well as *Eulychnia*, *Euphorbia*, *Alstroemeria* and *Cruckshanksia*, while in coastal Caldera we saw *Skytanthus*

acutus and *Oxalis gigantea*. In Llanos de Challe National Park, Mills showed us *Echinopsis deserticola*, *Nolana rupicola*, *Rhodophiala bagnoldii*, *Cristaria* sp., *Argemone hunnemanii* and more *Copiapoa*, all of which would do well in xeriscaped gardens.

Further south, we saw *Miqueliopuntia miquelii* and *Eulychnia chorosensis* in Punto Choros; *Eulychnia acida*, *Tristeris aphyllus* and *Cumulopuntia sphaerica* in Valle del Encanto; and *Aextoxicon punctatum* and *Fuchsia lycioides* in Fray Jorge National Park. La Campana National Park is home to *Echinopsis chilensis* and *Puya coerulea* as well as the world's largest population of *Jubaea chilensis* with over 60,000 specimens.

From there, we traveled through El Chagual Botanic Garden, Pumahaida Nursery, and into central Chile, a biodiversity hotspot with a climate similar to California. The area includes vineyards and matorral vegetation, similar to our native chaparral, and includes *Colliguaja odorifera*, *Quillaja saponaria*, *Lomatia hirsuta*, *Escallonia pulverulenta*, *Kageneckia oblongata*, *Colletia ulicinia* and *Tristerix verticillatus*. We also saw *Echinopsis bolligeriana*, *Eryngium paniculatum*, *Lobelia excelsa*, *Cistanthe grandiflora*, *Alstroemeria angustifolia*, *Eriosyce subgibbosa* and *Oxalis carnosa* at Punta Lobos, before heading down to several temperate rainforest parks.

Parque Nacional Radal Siete Tazas, is home to *Nothofagus glauca*, *Rhodophila* sp., *Lomatia hirsuta*, *Gevunia avellana*, *Calceolaria meyeriana*, *Chlorea* sp., *Gunnera tinctoria* and numerous waterfalls. Other forested areas nearby feature more *Nothofagus*, *Junellia*, *Stachys*, *Alstroemeria*, *Solanum* and *Misodendrum* species, as well as *Mutisia ilicifolia*, *Fabiana*

imbricata, *Tropaeolum tricolor*, *Puya alpestris* ssp. *zoellneri* and *Viola subandina*. *Berberis rotundifolia* and *B. x bidentata* are in Altos de Lircay National Reserve, and *Araucaria araucana*, *Chlorea magellanica*, *Prumnopitys andina* and *Embothrium coccineum* live in Conguillio National Park alongside lakes and active volcanos. Our final destinations were Park Pumalin and Quelulat National Park, located in Chile's lake district. The first is home to *Fascicularia bicolor*, *Fuchsia magellanica*, *Myrceugenia* sp., *Desfontania spinosa*, *Luma chequen*, *Philesia magellanica*, *Parablechnum cordatum*, *Eucryphia cordifolia*, *Gunnera tinctoria*, and the other is where you will find long-lived big trees like *Fitzroya cupressoides*.

Mills shared insights into how the natural landscape has been drastically altered by agriculture and plantations of pine and eucalyptus used by foreign paper industries, which have displaced native vegetation like the *Eriosyce aspillagae* cactus that is only receiving minimal governmental protection. Increasingly, Chile's flora is becoming more fragmented under threats by mining, forestry, hydroelectric projects and human-caused fires, like the one raging at the Jardín Botánico Nacional de Vine del Mar at time of Mills' talk, and he provided information on how interested parties can help.

✉ Sabine Steinmetz

Link here to see the entire program and learn where you can donate to aid Chile's national botanic park.

<https://www.youtube.com/watch?v=YmW8QeLL-yQ>

IN MEMORIAM As many of you may be aware, in late January we lost long-time member Joan Citron. A special SCHS tribute page of photos and memories will be emailed to members as a supplement to the newsletter and will include details to a Celebration of Life on Sunday, March 10.

2024 RUTH BORUN LECTURE SERIES featuring Brian Kemble



The SCHS is pleased to welcome Brian Kemble, curator at the Ruth Bancroft Garden in Walnut Creek, whose mission is to maintain both the look and feel of this preservation garden guided by Bancroft's original vision and design principles. Kemble will talk about some of the plants in cultivation at the garden and the places where they occur in nature. His meticulous plant selection for the successful integration of any specimen into the garden is based on its physical and aesthetic compatibility with the existing landscape – valuable criteria we might also consider in planning our own home gardens.

Mark your calendars for the evening of

FRIDAY, APRIL 12

at the Blinn House, Pasadena

FREE for Members / \$10 for Non-Members

Registration is required for this event. Members will be notified by email with full details when online registration opens.

SCHS MONTHLY GARDEN SHARE

It's "March madness" in the garden as we do the following:

- Begin planting warm season annuals and adding to our perennial beds.
- Continue with our fruit tree feeding schedule and begin fertilizing roses.
- Stay on top of the weeding while they're small. Plus, it's easier to pull them after one of our rainy days!
- Once you're finished with weeding, planting, or your "spring cleaning", apply a fresh 2" layer of mulch to protect and nourish your soil.
- Don't forget to visit your local botanic gardens for springtime inspiration!

Pace yourself & enjoy a break on these lovely rainy days!

✉ Sabine Steinmetz