In Brief

Well, we made it to a second issue! We introduce this year’s Second Vice Presidents of the California Botanical Society. They are critical for organizing the annual banquet! This year the annual banquet is in Bakersfield. That provides an easy drive to Tejon Ranch for a special field trip associated with the banquet.

We also spotlight a great western botanist, Art Kruckeberg. News about a revised *Flora of the Pacific Northwest*. We received our first letter to the editor.

**Phil Rundel** is the featured speaker at this year’s annual banquet. Phil has been active in research in a variety of ecosystems. He has or is currently serving a number of roles at UCLA including Director of the Mildred E. Mathias Botanical Garden. More about Phil later in the newsletter.

Participate in this new forum. You can email the newsletter editor, Tom Parker, at parker@sfsu.edu.

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Announcements:

The **2016 Banquet Meeting for the California Botanical Society** will be held on 9 April 2016 at California State University, Bakersfield. The meeting features a special field trip to Tejon Ranch with Maynard Moe as the local botanist guide. Should be amazing because there is actually rain this year! Just hope it continues a while, without floods and mudslides. Phil Rundel (UCLA) will be the banquet speaker! Story in this issue. You can follow this event and find more details at our website: http://calbotsoc.org/events/

The next **Graduate Student Meeting** sponsored by the California Botanical Society will be held in April 2017. As you know, it is never too early to begin preparing. The Santa Barbara Botanical Garden has tentatively agreed to host the meeting. Keep watching the webpage until we’ve firmed this up. We’re all looking forward!
We annually elect new Second Vice Presidents who are charged with organizing the annual banquet for the Society. This year we have two who are taking on this task! **Anna Jacobsen** (above) was trained at Pepperdine University (B.S Biology, with Stephen Davis) and her Ph.D. at Michigan State University, East Lansing, MI (with Frank W. Ewers). Her interests are strongly focused on plant structure and function with an emphasis on plant ecology and evolution. **R. Brandon Pratt** (right) is a plant physiological ecologist whose research interests focus on how plants are adapted to the environment. His undergraduate training was with Gary Tallman at Pepperdine, and his Ph.D. at Washington State University (with Al Black). Both are active in research and often collaborate. Check out their websites at CSU Bakersfield, Biology Department.
California Botanical Society’s Annual Banquet: 9 April 2016

This year the banquet will be held in Bakersfield, California. For more information and links to registering for the banquet, please go to our website: http://calbotsoc.org/events/

The banquet speaker will be Phil Rundel (Distinguished Professor at UCLA), who is well known for his ecological research. A member of the UCLA faculty since 1983, Dr. Rundel holds joint appointments in the Department of Ecology and Evolutionary Biology and the UCLA Institute of the Environment and Sustainability. He also serves as faculty director of UCLA Stunt Ranch Santa Monica Mountains Reserve, a field station for education and research in the Santa Monica Mountains. He was involved with the establishment of the UCLA La Kretz Center for California Conservation Science, and in 2011 received the UCLA Distinguished Teacher Award.

A special treat for the banquet will be a field trip to Tejon Ranch led by Maynard Moe (CSU Bakersfield). Maynard is finishing up a new flora to Kern County. The number of participants will be limited so keep up on the website for when the trip registration opens.
Field trip leader, Maynard Moe

Maynard Moe at Tejon Ranch, Martinez Ridge (upper left), Blue Ridge (above).
Art Kruckeberg: Pacific Northwest’s Expatriate California Botanist

By Richard Olmstead, University of Washington

Born, raised, and educated in California, Art Kruckeberg’s name is familiar to many California botanists for his long career devoted to the study of the serpentine flora of the western United States. Few are probably aware of his long record of contributions in conservation and public outreach in his later career, one that continues today at age 95!

Art was raised in Los Angeles in a family that owned a publishing house devoted to gardening publications and plant catalogs (Kruckeberg Press). He studied Botany at Occidental College as an undergrad and began grad school in 1941 with Ira Wiggins at Stanford. Uncle Sam had other plans, however, and, after intensive Japanese language training, Art shipped out to the Pacific theater to serve as a navy translator. After the war, he enrolled at U.C. Berkeley where he completed his Ph.D. in 1950 with Herbert Mason studying the variation in response of plants to serpentine soils.

A Californian through and through, Art embraced his new home in the Pacific Northwest and became Washington’s most well known and loved Botanist. Art’s introduction to Pacific Northwest botany began the summer before he began his faculty appointment at the University of Washington, when C. L. Hitchcock invited him to join him in leading his famous summer Field Botany class. He spent the entire summer travelling around the PNW with Hitchy and their students. By the time classes started in the fall, his immersion was complete! Throughout Art’s illustrious career as a Professor at the University of Washington, his interest in California plants (Streptanthus and Silene, in particular) was not displaced by, but grew to include, the PNW flora. His reputation at UW was equal parts scholar, teacher, mentor, and Chair of Botany.

(photos provided by Richard Olmstead)
When Art decided not to stay in the family publishing business, his father admonished him to not isolate himself in the ivory tower of academics, but to carry his interest in science to the public. With his career established and his scientific reputation firmly rooted, Art started to devote an increasing amount of time in public outreach and working to conserve the flora that he had come to love.

In the 1970s he worked with the State to establish the Natural Area Preserves Act and served on the Natural Areas Advisory Council to designate state lands of highest conservation value as Preserves. At the same time he sat on the US Forest Service, Region Six, Research Natural Area (RNA) Commission to establish RNAs to preserve areas of botanical interest. He also found time to develop the first list of rare and endangered plant species for Washington and lobbied the State to amend the Natural Area Preserves Act to create the Washington Natural Heritage Program to oversee the endangered species program for the state. Recognizing that the future of the region’s flora would be best served by having citizen involvement in plant conservation, he was instrumental in founding the Washington Native Plant Society in 1976 and served as Editor of their quarterly journal, *Douglasia*, for 10 years.
Between 1982 and 2005, Art authored five popular books that covered such subjects as the ecology and floristics of serpentine soils, the natural history of the Puget Sound region, and a popular guidebook to the best wildflower hikes in Washington. His most influential book has been *Gardening with Plants Native to the Pacific Northwest*; he is overseeing revisions for the third edition at this time. Final editing is all that remains for his long-awaited *Plant Hunters of the Pacific Northwest*, co-edited with Oregon botanist Rhoda Love, which he anticipates will be his last writing project.

Today, Art is still living on what will be a living legacy of his contributions to Pacific Northwest botany. The 4-acre lot that Art and Mareen Kruckeberg settled on in 1958 soon began to fill with a diversity of native plants, research organisms (including a small serpentine plot), plants grown from seed exchanged with botanists and gardens around the world, and a small nursery (MsK Rare Plant Nursery), which has provided urban gardens in the Seattle area with native plants for over 40 years.

The Kruckeberg Botanic Garden (http://www.kruckeberg.org) is now a public Garden owned by the City of Shoreline and managed by the nonprofit Kruckeberg Botanic Garden Foundation. California botanists visiting Seattle should plan a visit to the Garden. They will find many familiar plants set among a representative Pacific Northwest flora. What could be a more fitting legacy for this, the Pacific Northwest’s favorite expatriate California botanist!
Letters to the editor:

Tom,

What caught my eye was the name of the publication. One of the most engaging students we had was Camille M. Barr.

Camille studied *Nemophila* at Hastings and at the Hopland Field Station. Based at UC Irvine, Camille examined how nuclear and mitochondrial gene products interact (1). This work was done as a post-doc in Missoula, Montana, in 2006, using over 9,000 seedlings of *Mimulus*. Camille was one of the most gracious and enthusiastic scientists at Hastings. Her visits in 2007 were always welcome. Based on her samples of *Nemophila* at Hastings and elsewhere in California, Camille developed a taxonomic tree for *Nemophila* and described a new species of *Nemophila* named for the Hopland Field Station (*N. hoplandensis*) (2). Camille had a strong publication record in plant genetics and a great appreciation for field stations.

But, in 2012, Camille changed career direction and finished law school at UC Davis. Camille became a successful attorney in Irvine, specializing in intellectual law. Camille would often visit wildflower populations she had studied. We lost our *Nemophila* expert to brain cancer in 2014 (3). For those who know *Nemophila*, it is hard not to remember Camille.

Cheers,

Mark

Mark R. Stromberg, Ph.D.
Adjunct Professor, University of Arizona
(Formerly of Hastings Natural History Reserve)

Camille M. Barr

The University of Washington Herbarium (WTU) at the Burke Museum is revising the one-volume *Flora of the Pacific Northwest* published in 1973 by C. Leo Hitchcock and Arthur Cronquist. The new Flora will retain the title and geographic circumscription, as well as the overall look and feel of the fully illustrated keys.

The original 730-page book was designed by the authors to be a portable plant identification manual for professional and amateur botanists. It remains a model for how to produce a regional flora. However, in the 40 years since publication of *Flora of the Pacific Northwest* significant advances have been made regarding our knowledge of the region's flora, as well as major changes to the classification and naming of the taxa covered. These impacts can be summarized as follows:

- 28% net increase in the number of species and infraspecies;
- 40% of species and infraspecies names will require nomenclatural changes;
- 42% or more of the generic keys must be substantially modified.

Despite the passage of time, *Flora of the Pacific Northwest* remains a vital resource for academic researchers, federal and state agency botanists, land managers, undergraduate and graduate students, and amateur botanists. However, the keys from that volume only enable current users to arrive at accepted names for just 47% of the region's taxa. More often than not these users must consult floras from adjacent regions (e.g., *The Jepson Manual*) or the *Flora of North America* for identification purposes, none of which are comprehensive in terms of treating the Pacific Northwest flora.

Starting the project required scanning every illustration plate from the 5-volume *Vascular Plants of the Pacific Northwest* and then digitally cutting each taxon illustration into an individual image file. The approximately 4,000 files generated are being placed into revised treatments. We also imaged every page of the original one-volume *Flora* and ran the images through optical character recognition (OCR) software. This generated editable text files that volunteers reviewed to catch OCR errors. The cleaned files were then converted to Word documents with the original *Flora* formats. These documents serve as the basis from which treatments are revised. The completed treatments are illustrated with a combination of the approximately 4,000 files from the 5-volume *Flora* and new illustrations commissioned for the revision.

To the extent possible we are doing the revision work in-house, with Ben Legler and David Giblin doing the majority of the treatment writing, editing, and layout. We are contracting with a number of regional botanists to author treatments of major groups: Peter Zika (Cyperaceae, Juncaceae, Rosaceae), Ed Alverson (Ferns), Mark Darrach (*Lomatium*), Mark Egger (*Castilleja*) and the Carex Working Group (Salicaceae, Poaceae). Noel Holmgren has kindly offered to provide the *Penstemon* treatment. Our goal is to have the revision completed in 2017.
Flora of the Pacific Northwest

cont.

To date we have illustrated draft treatments for 85 of 161 families comprising approximately 40% of the taxa to be treated. The primary illustrator for the project is Crystal Shin, with significant illustrations provided by Dr. Linda Vorobik (Brassicaceae), Dr. Pat Lu-Irving (former UW graduate student in Olmstead lab), Natsuko Porcino (former UW Biology undergraduate), Rachael Whitehead (current UW Biology undergraduate), and Angela Mele (graduate of UW Museology).

Funding for the project has been provided from a range of sources, including a major gift from Chris Davidson and Sharon Christoph, Pendleton and Elisabeth Carey Miller Charitable Foundation, U.S. Forest Service/U.S. Bureau of Land Management, Garneau-Nicon Foundation, Seattle Garden Club, Washington Noxious Weed Control Board, native plant societies in Washington, Idaho, and Oregon, as well as over 60 individual donors.

Anyone wishing to have a pdf containing all treatments completed to date can contact David Giblin (dgiblin@uw.edu). We welcome field testing and feedback from users on these treatments. More details about the project can be found at our Web site:


Next Issue: The Oregon Flora Project

In the next issue we’ll have a similar set of articles about the ongoing Oregon Flora Project. At this point, the Oregon Flora Project (http://oregonflora.org) is pleased to announce that the illustrated Volume 1 of the Flora of Oregon is now available! Volume 1 of the 3-volume set covers the ferns and fern allies, gymnosperms, and monocots—ca. 23% of all native and naturalized vascular plants of Oregon. Specifications: 7.5" x 10.5" hardback, 608 pp., 520+ b/w illustrations, 1000+ distribution maps, 73 natural landscape color photos. $75. Order online at http://shop.brit.org.
New botanists in the west

While we’ve been highlighting some experienced botanists from the west in this and the last issue, we’d also like to call attention to new hires across the west. We have some names and have contacted a number of them, but if you know someone who’s been hired in the last year or so, let us know. The more we know about colleagues, where they’re located, and what their interests are, the more we can find collaborators or research of interest. So far, of those we’ve contacted, one (only one so far!) has sent me some information and a photo.

Carl Rothfels is an assistant professor in the Department of Integrative Biology and the Curator of Pteridophytes at the University Herbarium (University of California, Berkeley). A recent transplant to California, he was born and raised in southern Ontario (Canada), and received his Ph.D. from Duke University. His research focuses on the evolution of ferns and lycophytes, with particular interests in the fern family Cystopteridaceae, desert ferns in the genus Notholaena, and the processes of polyploidy and reticulation (hybridization).
Job Announcements:

**Assistant Professor, Plant diversity and evolution - UCLA**

To apply, [https://recruit.apo.ucla.edu/apply/JPF01858](https://recruit.apo.ucla.edu/apply/JPF01858)

**Director, University of California Botanical Garden (UCBG)**

The University of California – Berkeley seeks applications for a Director of the University of California Botanical Garden (UCBG). This full-time position is anticipated to start in July 2016 for an initial three-year term, and is renewable thereafter based upon performance. [https://aprecruit.berkeley.edu/apply/JPF00883](https://aprecruit.berkeley.edu/apply/JPF00883)

**Assistant Director for Horticulture and Collections**

Assistant Director for Horticulture and Collections at the Mildred E. Mathias Botanical Garden (MEMBG), UCLA. [http://www.botgard.ucla.edu/](http://www.botgard.ucla.edu/)

**Rare Plant Biologist, Santa Barbara Botanic Garden**

Responsible for running a comprehensive rare plant conservation research program. monitoring, rare plant seed collection, and species recovery. [http://www.sbbg.org/get-involved/employment/current-openings](http://www.sbbg.org/get-involved/employment/current-openings)

Curator, San Francisco Botanical Garden Society

Please submit resume and cover letter outlining background, experience, interest and salary requirements via email, to curator@sfbg.org. SFBGS hopes to fill the position as soon as possible.

**Assistant Professor and Herbaria Director position**

Louisiana State University invites applications for a tenure-track Assistant Professor position and Herbaria Director. Visit: [http://www.herbarium.lsu.edu](http://www.herbarium.lsu.edu)

**We are seeking short articles, letters to the editor or items of interest to the members of the California Botanical Society concerning the Western North America region.** Please contact Tom Parker, parker@sfsu.edu.

California Botanical Society Officers 2015-2016

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1st Vice-President: Andrew Doran (University and Jepson Herbaria)
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