No. 44
Summer 2015

DAVIS BOTANICAL SOCIETY

LASTHENIA

NEWSLETTER OF THE DAVIS BOTANICAL SOCIETY

SHIRLEY AND KENNETH TUCKER FUND MOVES HERBARIUM FORWARD

In May, the Center for Plant Diversity herbarium received a significant monetary gift from Shirley Tucker, renowned lichenologist and plant morphologist. The gift, which is the second largest monetary gift in the herbarium's history, is being used to hire additional manpower in the herbarium in the person of new Assistant Curator Daniel McNair (see articles on page four). "A strong herbarium is a nucleus to maintain botany as a science," Dr. Tucker says. "Unfortunately quite a few herbaria around the country have disappeared, but Davis is one place where you can get a complete education in botany."

Dr. Tucker has a long relationship with the herbarium. She came to UC Davis (as Shirley Cotter) in 1951 to study with renowned anatomist Dr. Katherine Esau. By the time Dr. Tucker arrived at UC Davis from Minnesota, her home state, she had already collected over four thousand herbarium specimens as an undergraduate, with a major emphasis on lichens. Throughout her career, she has made nearly 40,000 plant collections, most of which are housed at the Santa Barbara Botanic Garden and Louisiana State University.

Dr. Tucker very much admired her mentor, Dr. Esau. "She was a real role model for a woman student," says Dr. Tucker. "She excelled in her research on the vascular tissue of plants. She helped me a lot." Dr. Tucker received a Fulbright to study in England at the University of Reading during the 1952-1953 year; she completed her PhD in 1956 (dissertation title: Ontogeny of the Inflorescence and the Flower in *Drimys winteri* var. *chilensis*). Eventually, Dr. Tucker continued on to Louisiana State University (LSU) where, emulating her mentor's success, she became a professor of botany and a Boyd Professor, an honored chair position. She taught anatomy, morphology, and lichenology, among

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Shirley Tucker at home in Santa Barbara. Photo: E. Dean

A STUDENT PRAISES THE BOTANICAL CONSERVATORY INTERNSHIP

Editor's note: Ilean Battraw, a Junior Specialist in the UC Davis walnut breeding program, began her botanical career with an internship at the Botanical Conservatory.

Ilean in the Conservatory sporting a neck band made from a branch of Crassula perforata. Photo: E. Sandoval

The UC Davis Botanical Conservatory internship was recommended by my advisor only because I needed 6 credits total for summer session to qualify for financial aid. But this pragmatic introduction became much more than a financial strategy. While my formal classes taught me the theory of plant science, the internship gave me firsthand experience I could use to obtain a job after college. It gave meaning and context to the information learned in my classes. It was work experience, but experience that made me enjoy plants and greenhouse work even more. The internship created a substantial base for my interest in greenhouse operations, plant propagation, and restoration.

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CONSERVATORY INTERNSHIP (CONT. FROM PAGE 1)

The Internship covered pruning, different methods of plant propagation, grafting, proper plant care, i.e., transplanting, watering and fertilizing, and general greenhouse maintenance, including weeding and cleaning. Once a week, Ernesto Sandoval would have a teaching session explaining important plant concepts. These would later be translated into practical experience. A topic I remember particularly is the function of plant hormones. Ernesto emphasized the two plant hormones auxin and cytokinin and their relationship to each other. Understanding the function of these two hormones helped explain why pruning for form, plant propagation via cuttings, and grafting are possible. Though I had learned about these hormones in class, I had not realized their importance and connection to greenhouse activities until Ernesto explained them to us and set us to work pruning with these hormones in mind. This concept has stayed with me at work, school, and home.

This internship eventually led to my becoming a student employee at the Botanical Conservatory. As a student employee, I further refined my greenhouse skills and built upon the concepts and activities I had learned as an intern. I learned to scout for pests and how to deal with those I found, to prune a certain way based on growth type, to inhibit plant pathogens by proper cleaning of tools, pots, and floors, and how to tell when to transplant. In the process, I also learned how much I enjoyed the greenhouse atmosphere and workplace.

Near the end of my time at UC Davis, I obtained an internship at a local orga-nic pesticide company which later became a full time position as a Plant Pathology technician. Throughout my time there, I kept in mind how much I had enjoyed the greenhouse and how much I would like to work in such a place. This aspiration led me to apply for a position at UC Davis. I attribute my application's being competitive, and being hired for this position, to the internship and employment at the Botanical Conservatory. Looking back, I doubt I would have been considered for the position at the Conservatory had I not taken the internship. The position as a plant pathology intern and later technician at the organic pesticide company, and now my position as a Junior Specialist, are all the result of a one credit summer internship at the UC Davis Botanical Conservatory.

I. Battrow

ERNESTO'S CONSERVATORY PHOTO UPDATE!

Above:
Summer interns Rebecca, Rosie, Thuy, Maggie, Wahib, and Shannon on their last day of the Summer 2015 internship. Due to budget and staff reorganization, this popular internship may not be offered this academic year. Ernesto hopes to establish donations to re-grow this activity.

To the right above: Marlene Simon, Conservatory Staff Horticulturalist and previous Davis Botanical Society Board Secretary (also The Plant Lady on Good Day Sacramento) shows off her first-ever attempt at a cactus graft.

To the right: Conservatory staff grow a variety of plants for teaching purposes. This unhappy plant is the result of being grown in solution to induce calcium deficiency and demonstrate its importance!

RECENT GIFTS

Herbarium Endowment
Michael Barbour & Valerie Whitworth
Liz Bernhardt & Ted Swiecki
Lewis Feldman
Hazel Gordon
Gordon & Delia Harrington
Hedgerow Farms
Russell Huddleston
Charles, Jessica & Henry Hughes
Louise Jackson & Patrick McGuire
Judy Jernstedt
Franz Kegel (*In memory of Tucker, McCaskill, Major, Weir, Crafts, and Currier)*
Charlotte Kimball
Julie Knorr
Sally Manning
Jack Maze
Pam Muick
Warren Roberts
Edwin Royce
Maxine Schmalenberger
Roberta Stevenson
Craig Thomsen
Roberto Urtecho
J. Giles Waines
Bruce & Beverly Watros
James & Katherine West (*In memory of June McCaskill)*
Alan Whittemore
Roger Willmarth
Gary Zamzow

Shirley and Kenneth Tucker Fund
Shirley Tucker

Herbarium Operations
Lewis Feldman
Kate Mawdsley
In memory of James Neilson:
Dianne McQuaid
Katherine Neilson

Herbarium Gifts in Kind
Anonymous
Deborah & Shad Canington
Gerald Dickinson

Conservatory Endowment
Sonia Cook
Judy Jernstedt
Roger Willmarth

Conservatory Operations
Randy Baldwin
John Brittnacher
Timothy Devine
Reynotta Hoberecht
Victoria Veen

Davis Botanical Society Student Grants Fund
Michael Barbour & Valerie Whitworth
Kai Battenberg
Gerald Dickinson
Ron, Diana, & Nora Glick
E. Eric Grissell
Louis & Georgette Grivetti
Russell Huddleston
Pam Muick
Terence & Judith Murphy
Thomas & Ann Rost
Maxine Schmalenberger
Larry & Rosalie Vanderhoef
James & Katherine West *(In honor of Eric Conn)*
Roger Willmarth

Jack Major Student Grant Endowment
Ann Johnson

Thank you for your support!

SOCIETY PROFILES — *Andrew Latimer*

One of the most rewarding duties of the editor of *Lasthenia* is interviewing the incoming president of the Davis Botanical Society each year for a profile for the Summer issue. While walking to the Plant and Environmental Sciences Building in early July, I remembered 2015-16 President Andrew Latimer's article in the last issue, on the effects of fire on plant communities in the Sierra Nevada. That research on responses to fire in the Sierra Nevada received considerable attention during the fires in Solano, Napa and Lake Counties in July and August this year. So it was a real surprise to walk into his office, glance at the bookshelves, and see the spectacular blooms of South African Proteas on a book jacket. Andrew, in fact, was leaving imminently for a conference in Cape Town on the evolution of biodiversity in that iconic genus and as well as in the genus *Pelargonium*, another South African native.

The unifying thread between showy exotics (which live in a habitat quite similar to California chaparral) and our familiar flora is statistical and mathematical ecology. The Latimer lab studies how environmental variation affects plant communities, populations, species and lineages. Andrew came to UC Davis in 2008 and is now an Associate Professor in the Plant Sciences Dept. He teaches upper-division classes in plant ecology, trees and forests and fire ecology. He is also developing a graduate program in biostatistics and directing the work of several doctoral candidates.

Andrew completed an undergraduate degree from Dartmouth and, in what he now considers a detour, went to law school at Yale and worked for a short time with the Environmental Protection Division of the Massachusetts Attorney General. Finding his real passion, he returned to graduate school at the University of Connecticut in plant ecology and systematics. His major advisor had a grant to study Proteas and apply models to mapping their distribution; Andrew began related research under the grant, and his professional path to UC Davis was launched. We are very grateful that Andrew has consented to take the helm of the Davis Botanical Society for the 2015-2016 year, and he looks forward to meeting our members at one of our events.

Andrew Latimer with children Leo (left) and Suzy (right) in the high Sierra Nevada. Photo: A. Latimer

K. Mawdsley

PALEOBOTANICAL ADVENTURES IN MISSISSIPPI

In my second year of graduate school at the University of Southern Mississippi, my advisor invited a paleobotanist to give a seminar talk. Brian Axsmith (at the University of South Alabama) is probably not your typical paleobotanist—he sports a long gray ponytail and plays bass guitar at various clubs in Mobile on the weekends. If that didn't get my attention, what he said in his talk did, "Plant fossils are probably all over Mississippi; we just haven't done a good job looking for them."

I think modern plants are pretty exciting (my field work in Mississippi allowed me to explore the state and see some really beautiful plants), but as soon as Axsmith finished his talk, I rushed out to the nearest hardware store and bought a bricklayer's hammer, determined to find plant fossils.

In Hattiesburg, Mississippi you are already in the middle of nowhere, so a 20 minute drive outside of Hattiesburg lands you further into the middle of nowhere. I knew a place where the Bowie River cuts though some grey siltstone. I went there first and started digging (we looked up the land owner later and got her permission!).

Sycamore (Platanus) fossil from the Bowie River siltstone deposit. Photo: D. McNair

Mulberry (Morus) fossil from the Bowie River siltstone deposit. Photo: D. McNair

That night, I emailed Axsmith photos of the leaf fossils I had excavated. He responded immediately: "would you mind letting me see this place?"

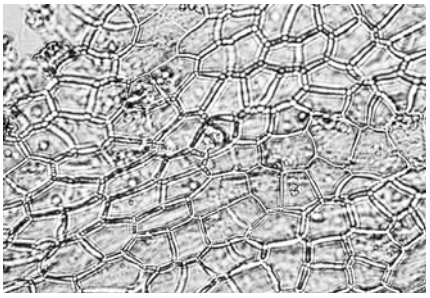
It wasn't long before the geologist in charge of the USGS survey for South Mississippi, James Starnes, was also interested in the site. He confirmed the geological age that Axsmith suspected: Miocene (23 to 5.3 million years ago). Starnes explained that the siltstone deposit was the result of a massive river delta during the Miocene that was several times larger than the Mississippi River delta is today.

Axsmith did some more research and found that only four kinds of plants were known from this formation. In a few months of digging and mulling over specimens, we identified about 15 more taxa from our collections at the site. Among these was the beautifully preserved fruit of *Sargentodoxa*, a plant that only grows in East Asia today. We also found a lot of plants that still grow in the area today: sycamore, palm, bald cypress, mulberry, willow, and poplar.

Many of the leaves from the site were so well preserved that the leaf cuticles were still intact, which helped us confirm the identity of the bald cypress leaves we found by checking the alignment of the stomata. Sometimes I would split open the siltstone and find leaves with patches of greenish-brown pigment still intact! This material would oxidize and turn black in a few minutes.

We are in the process of writing up our findings for a detailed publication, but several more photos are available at www.danielmcnair.com (click on "Plant Fossils from the Miocene of Mississippi").

D. McNair



Cuticle of willow (Salix) fossil from the Bowie River siltstone deposit. Photo: D. McNair

WELCOME ASSISTANT CURATOR DANIEL MCNAIR

Thanks to the generosity of Dr. Shirley Tucker and the Shirley and Kenneth Tucker Fund, Daniel McNair has joined our team as Assistant Curator of the herbarium. Daniel comes to us from the University of Southern Mississippi in Hattiesburg, where he worked as the database/imaging supervisor in their herbarium (with National Science Foundation funding) and completed his Master's degree with Mac Alford on the vascular flora of Wayne County, Mississippi.

Daniel grew up in Clinton, Mississippi, the youngest of three children. After studying English and Classics as an undergraduate, he became interested in botany while teaching Latin at a private school. He decided that Latin would be more interesting if he used it in the outdoors while teaching the students the Latin names of plants. Along the way, he taught himself the plants of Mississippi. Slowly, botany became more interesting to him than Latin, and eventually, he contacted Mac Alford about the possibility of doing a Master's in Botany.

As might be inferred from his route to botany, Daniel has a wide variety of interests, chief among them photography. He has his own photography website (danielmcnair.com), where he exhibits a wide variety of photos. He became interested in photography after borrowing his wife's DSLR camera several years ago; she is still waiting for it to be returned. See his article above (as well as some of his photos) that relates his paleobotanical adventures. Welcome Daniel!

E. Dean

SHIRLEY AND KENNETH TUCKER FUND (CONT. FROM PAGE 1)

other courses, and studied many types of plants, including magnolia, peppers, and legumes. She published extensively, received many accolades, and served as president of the Botanical Society of America and the American Society of Plant Taxonomists. In October 2015, she is being honored at LSU when the herbarium there is christened "The Shirley C. Tucker Herbarium."

UC Davis is also where Dr. Tucker met her future husband, Dr. Ken Tucker, an entomology graduate student, and brother of Dr. John Tucker (longtime professor of botany, director of the herbarium and benefactor for whom the Botany Department part of our herbarium is named). Over the past 20 years, I have been able to get to know both Ken and Shirley, when they came to Davis to visit John and participate in numerous Davis Botanical Society trips. Ken was also a strong supporter of our herbarium, and he and Shirley became Life Members of the Davis Botanical Society over 10 years ago. Sadly, Ken passed away in 2014; this gift, The Shirley and Kenneth Tucker Fund, honors them both.

We have many Shirley Cotter specimens in our herbarium, both vascular plants and lichens. During her many visits to our herbarium, Dr. Tucker has curated our lichen collection, re-identifying specimens and putting our specimens into order. She has also been very active in the California Lichen Society (CALS), participating in field trips all over the state, including the Channel Islands, and counties with very different habitats such as El Dorado, Mendocino, Lake, Santa Cruz, Monterey, San Mateo, Inyo, and San Bernardino counties. After each trip, she summarized the results for the CALS Bulletin, and she continues to publish on lichens and assist people with lichen identifications.

I am tremendously grateful for Shirley Tucker's support of this herbarium as well as for her friendship and advice. We very much needed this extra support at this time in order to complete long-needed curation projects and allow me to participate in a major taxonomic project funded by the National Science Foundation. Thank you, Shirley!

E. Dean & J. Stumbos

2015 STUDENT GRANT RECIPIENTS

Similarities and differences both stand out in the projects receiving Davis Botanical Society student grant awards in 2015. Somewhat unusually, two projects have field sites in Latin America; the other research sites are within an easy commute from campus. Two projects expect to identify new species as one product of the research. Two students identify immediate practical applications for their results, and two of the applications were graced with full-color photos and graphs. All, of course, will provide specimens for the herbarium.

Kyle Christie, who works with Prof. Sharon Strauss as a third-year Ph.D. student in the Population Biology Graduate Group, was awarded the Davis Botanical Society grant for research at the McLaughlin Reserve (think: serpentine!) on two closely related species of *Streptanthus*. Building on his own and other UC Davis researchers' work on the complex genus, Kyle is focusing in on extensive ecological data collections on habitat use, flowering time overlap, and pollinator behavior to understand patterns of biodiversity in the *Streptanthus breweri* complex.

The other nearby project, "Grazing Effects on Vernal Pool Plant Diversity Across a Heterogeneous Landscape," will use a planned change in grazing practice on a 1,132-acre SMUD property in southeastern Sacramento County to test the impact of livestock grazing in

vernal pool landscapes on the diversity and composition of plants in and around the pools. Julia Michaels, a Master's Degree student with Prof. Val Eviner in the Dept. of Plant Sciences, received the Larry and Charlotte Mitich award for her work. Prof. Eviner expects that "Julia's work will provide critical site-specific management guidelines for vernal pool managers."

Laura Morales' research is on "Recruitment Limitation and Germination Ecology of *Polylepis* Tree Colonization into Andean Grassland." Working with a genus that grows at elevations of 3,500 to 5,000 meters, her research is geographically and ecologically about as far as possible from lowland Sacramento County. However it is similar to Julia Michaels' project in a commitment to contributing to practical environmental restoration. Laura works with Prof. Truman Young in the Graduate Group in Ecology; her project focuses on describing and understanding the regeneration ecology of two *Polylepis* species in Huascaran National Park in Peru and how fire, livestock and climatic factors jointly shape the current forest/grassland boundaries and the potential for assisting expansion. She received the Jack Major award.

Costa Rica is the locale for Micah Freedman's project, unique in the history of DBS grants in studying a genus and species in which floral scent is of central importance. The *Gongora quinquenervis* complex is one of the orchids pollinated by euglossid bees, which collect specific scent compounds from the orchids. Because morphological characters are insufficient to identify to the species level, floral scent profiles may be the only reliable character for identification of some species. Micah will use plastic oven bags and a pump to capture the scent compounds of newly opened flowers in activated charcoal filters which he will analyze in the lab of Prof Santiago Ramirez of the Population Biology Graduate Group. The results of the chemical analysis and other data will become part of phylogenetic analysis to determine whether the complex is made up of multiple species. Micah received the E. Eric Grissell award to aid his research.

Thanks to the generosity of donors to the endowed and current student grant funds, the society was able to award a total of $ 6,185 for 2015. The support will make a big difference to these clearly worthy students.

K. Mawdsley

A CRUSADER FOR CURATION

Editor's note: Allyson Ayalon is an alumna of UC Davis who majored in Plant Biology and worked in the herbarium as an undergrad helping revise the synonymy of the California collections before the 2012 Jepson Manual was published. She also curated June McCaskill and Lou Grivetti's Greek specimens and prepared our exhibit of those specimens for last year's Botanical Tea. Now, she is our Davis Botanical Society Board Student Member while she completes a UCD Master's degree in Environmental Horticulture, with an emphasis on herbarium and garden curation. She spent the summer of 2015 as a curatorial intern at the Betty Ford Alpine Gardens in Colorado.

What *is* curation? This question crossed my mind so often while I was working in the herbarium as an undergrad that I decided to spend my time in graduate school exploring the meaning of curation as it applies to plant collections. With science and technology moving at a rapid pace, caring for our collections often falls by the wayside. Scientific collections live in the shadow of current research, deprived of attention and resources despite their role in documenting the *current research* of the past. Both applied and interdisciplinary, curation has a blurry past and an unclear future in plant collections.

"Curation" in museum science applies to the practice of selecting and managing collections. In plant collections, curators are responsible for upholding the scientific, historic, cultural, and sometimes aesthetic integrity of their collections. Lover of plants both dead and alive, I set out recently to try to understand how curation of living collections in public gardens differs from herbarium curation.

Curation of herbarium collections is a scientific process, requiring thorough knowledge of plant taxonomy, ecology, geography, and history. The goal is to make sure the species identification is correct, the current nomenclature is up-to-date, the associated data (date, place, ecology, collector, etc.) are accurate, and that the collections are preserved physically. In some herbaria, the curator may also be responsible for augmenting the collection where it is lacking by going on collection trips. Thus, curators maintain the integrity of the collection for use by other scientists for their research or simply for the innate value

Allyson in Colorado.
Photo provided by the author.

of documenting plant diversity for the future. Behold, curation!

To learn more about living collections, I spent my summer in Vail, Colorado doing a curatorial internship at Betty Ford Alpine Gardens. There I learned that curators of living collections are responsible for maintaining the integrity of their collections. Sound familiar? In living collections, curators need to bring in new plant species and genotypes, maintain plant records of the collection, produce and maintain display labels for the public, and make sure their plant identifications are accurate. Oh yeah, and they have to keep their plants alive.

Each type of curation has its set of challenges. For example, I learned that when plants are alive, they move! The alpine collections that I worked with tend to have much smaller plants—fondly referred to as "buns" and "cushions." Sometimes plants seemed to move from where you last documented their location. Was it dead? Dormant? Was it that scrawny thing to the left that looks chlorotic, dry, or (most frustratingly) like another cultivar? Tracking plants for record-keeping as well as for the public display can be difficult; it made me nostalgic for those immobile two-dimensional collections I love so much at the herbarium!

Public gardens can also become bogged down trying to maintain the aesthetics of the garden for the public, since that is the main reason most visitors come. This can push maintaining the scientific integrity of the garden to the back burner. Many gardens do not have time to redo their plant labels to reflect changes in the Scrophulariaceae plant family, for example, when they have weddings to put on and need to find a way for the groom to ride in on a horse (yes, that really happened at Denver Botanic Garden!). It can be a slippery slope. Once maintaining a collection falls behind, a backlog of poorly tracked records becomes ever harder to deal with.

Herbaria struggle with record keeping as well, but since their priority is not for the public to enjoy their landscape, they struggle instead with staying afloat financially without charging an entrance fee. If herbaria become strapped for funding, collections can sit in cabinets for years before they are curated, digitized, mounted or filed, making them less accessible to researchers.

So what does all this mean for me? Have I resolved the meaning of curation for myself? Hardly. Five years after I first began working in plant collections, I

Cliff maids (Lewisia cotyledon)
Photo: A.Ayalon

realize how much I still have to learn if I want to be a curator. Learning about botany and horticulture is a *lifelong* endeavor which involves meeting new plants each day while developing a deeper appreciation for documenting and preserving plant diversity in a rapidly changing society. In an age where botany can require computer programming skills and most horticulture graduate students are actually plant breeders, someone has to claim responsibility for caring for our collections. To those who have devoted their careers to managing plant collections, I salute you. To those of us who aspire to be the next generation of curators, hang on tight.

A. Ayalon

GRADYANA, A NEW GENUS OF FLOWERING PLANTS

A new species in the spurge family (Euphorbiaceae) has been named *Gradyana*, in tribute to the late Grady Webster's decades of distinguished taxonomic research on the family. Publication of *Gradyana franciscana,* from the semi-arid region of northern Brazil, appeared in *Systematic Botany* in August 2015.

Dr. Webster was professor of botany at UC Davis from 1966 to 1993. His retirement was imperceptible to other people in the herbarium; he was here virtually daily unless he was on a field trip. He had just returned from his annual collecting trip in his native Texas and was awaiting the arrival of those specimens when he suffered a fatal stroke in October 2005.

In addition to his world-renowned research on the spurge family, he was also Director of the J.M. Tucker Herbarium (the Botany Department Herbarium) from 1986 to his retirement. When the herbarium was defunded in the early 1990s, he was the prime mover in the founding of the Davis Botanical Society and the originator of the student grants program. His career and mentorship was remembered in the Fall 2006 issue of *Lasthenia*.

Grady Webster in the Botany Department Herbarium in Robbins Hall. Photo: Center for Plant Diversity Archives

The importance of Dr. Webster's ongoing research is evidenced by the number of in-progress projects which other specialists rallied to complete and by the National Science Foundation grant to the Center for Plant Diversity in 2011 to make available electronic resources related to the genera in the Euphorbiaceae in which he had specialized.

The Grady Webster Euphorbiaceae Resources website, including a Virtual Herbarium, can be accessed at the Center for Plant Diversity website (http://herbarium.ucdavis.edu/taxonomicresources.html).

K. Mawdsley

UPCOMING TALK GIVEN BY HERBARIUM ALUMNA

Tanoak, now *Notholithocarpus densiflorus*, has been at various times prized as a food source, harvested indiscriminately, and disparaged by the people who found it in California's evergreen forests. In the mid-1990s it was the first tree in the coastal forests to show the devastating effects of the disease sudden oak death syndrome.

Frederica Bowcutt completed a Ph.D. in Ecology at UC Davis and is a professor of botany at Evergreen State College in Olympia, Washington. As part of her dissertation research, she published several floras and left several thousand plant specimens at our herbarium. She began studying the history of the use and abuse of tanoak while a graduate student at UC Davis. Now her book, *The Tanoak Tree, an Environmental History of a Pacific Coast Hardwood,* has been published by University of Washington Press.

As described in the UW Press release, "Bowcutt examines the complex set of factors that set the stage for the tree's current ecological crisis. The end of the book focuses on hopeful changes including reintroduction of low-intensity burning to reduce conifer competition for tanoaks, emerging disease resistance in some trees, and new partnerships among tanoak defenders, including botanists, foresters, Native Americans, and plant pathologists.

Frederica will return to Davis for a talk and book signing co-sponsored by the Davis Botanical Society and the UC Davis Arboretum on Sunday, Nov. 22, at 3 p.m. Whole Foods Market has generously offered the use of their Annex and will provide light refreshments during the signing after the talk. Copies of the book will be for sale courtesy of the Avid Reader.

K. Mawdsley

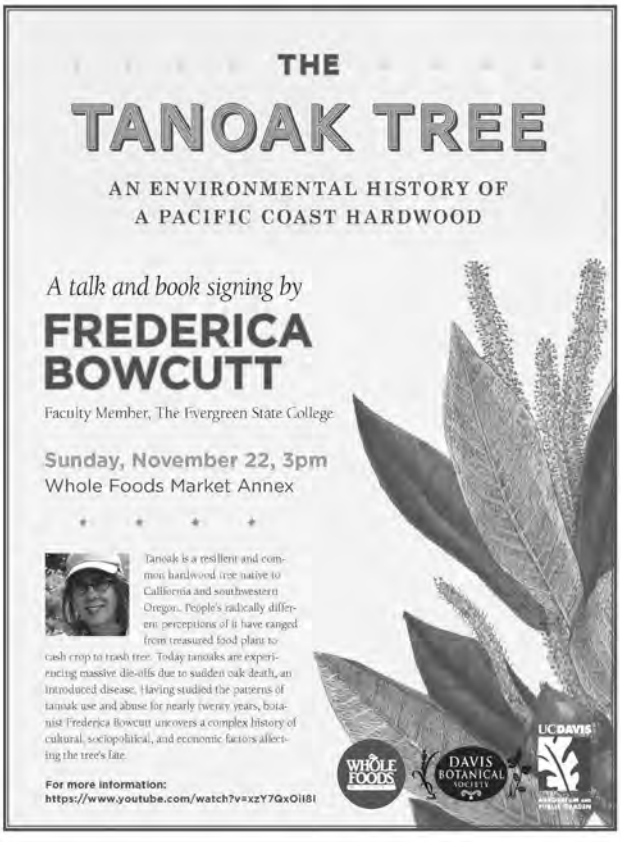


Image courtesy of UC Davis Arboretum

UPCOMING EVENTS

See: http://herbarium.ucdavis.edu

Thursday Nov. 19. Student Grant Recipient talks and free pizza.

Sunday Nov. 22. The Tanoak Tree. Talk by Frederica Bowcutt.

Sunday Dec. 13. Herbarium Volunteer Sunday Afternoon.

Sunday Jan. 24. Herbarium Volunteer Sunday Afternoon.

Wednesday Jan. 29. Botanical Tea and Exhibit: Herbarium Newspapers: A Botanists' Newsfeed for the 20th Century

LASTHENIA

LASTHENIA, the Newsletter of the Davis Botanical Society, is published in collaboration with the staff of the UC Davis Botanical Conservatory and Center for Plant Diversity.

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