

News & Notes of the UCSC Farm & Garden

Issue 154, Fall 2017

Center for Agroecology & Sustainable Food Systems

Growing Farmers & the Food Movement for 50 Years – Jennifer McNulty

Middle age has a way of sneaking up on people and programs, so hearing now that the experiment in organic gardening that began at UC Santa Cruz in 1967 is the oldest university-based organic research and education facility in the country is, well, unexpected.

"It's the people's farm," says Daniel Press, professor of environmental studies and executive director of the internationally acclaimed, hands-on learning and research programs housed at UC Santa Cruz. "What began as a student- and faculty-initiated idea to create a garden as a place for repose, renewal, and connection is, today, an incredibly well-rounded resource that exists to serve and inspire people."

More than 1,500 apprentices have learned the art and practice of organic farming and gardening at UC Santa Cruz, making them the "signature crop."

"If you meet an organic farmer in California, we probably trained them or someone who trained them," says Press, only half in jest.

Farmers aren't the only crop produced by the Center for Agroecology and Sustainable Food Systems. The Center is home to a range of programs that have upended just about every aspect of food production.

"Universities are incubators of new ideas, and the Center has brought together the science and social aspects of food production in a way that is changing the landscape and the body politic," says Press, who would like to retire the Center's unwieldy name in favor of something more lyrical.

Recently retired Congressman Sam Farr (D-Carmel) was an early and passionate fan of the campus's agroecology programs, and his advocacy in Washington, D.C., brought in much-needed federal support during his 22 years in the capital.

"The modern-day food movement really began at UC Santa Cruz, where a small band of visionaries embraced organic agriculture and did things that conventional growers said couldn't be done," says Farr. "Those pioneers went back to basics, learning how to nourish the land and grow crops without harmful chemical inputs."

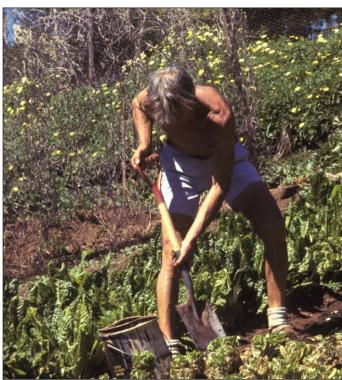
Those visionaries started a revolution that is stronger than ever 50 years later, adds Farr: "They're still the visionaries, pushing for safe working conditions and fair wages for farm workers, training farmers, promoting community-supported agriculture, and always as guardians of the public interest and our precious natural resources."

Roots of Success

It all began 50 years ago when faculty and students appealed to Chancellor Dean McHenry, proposing a garden project that would serve as a central gathering spot on the remote, forested campus. As legend has it, Alan Chadwick, a charismatic, somewhat cantankerous master gardener from England, chose a steep, rocky, sunscorched slope covered with poison oak to prove a point: If students could create a garden there, they could create one anywhere. And create they did.

With no chemical fertilizers, pesticides, or herbicides, Chadwick and his crew used only natural fertility, hand tools, and love to create a lush 4-acre plot that soon overflowed with vibrant vegetables and fragrant flowers. Chadwick introduced the French intensive, raised-bed method of gardening that features double digging, compost-enriched soil, dense plantings, and diverse crops. Today, the garden's beds produce tender, melt-in-your-mouth lettuces, succulent basils, a rainbow of peppers, a cacophony of blossoms—all framed by redwoods, citrus trees, and more than 120 varieties of heirloom apples and pears.

News & Notes



Alan Chadwick at work in UCSC's Student Garden Project.

Just up the road from Chadwick's merry troupe, Alice Waters, the owner of Berkeley's famed Chez Panisse restaurant, was planting the seeds of a flavor revolution by creating an appetite—and demand—for fresh, organic, locally grown fruits and vegetables.

"Chez Panisse and the Center are kindred spirits, changing the world by changing the way we eat, the way we grow food, and the way we teach our children about the land," says Waters.

On campus, the garden became a "laboratory"—a hub of teaching and hands-on learning that became a model for all that followed.

"UC Santa Cruz has been at the forefront of the food movement for decades, preparing farmers, teachers, cooks, community activists, and policymakers to help us build a healthy, sustainable food system," says Waters, whose own mission has also broadened; she founded The Edible Schoolyard in 1995 to bring a hands-on, gardenbased "edible education curriculum" to children from kindergarten through high school.

A Farm Is Born

The campus rapidly outgrew the garden as students, faculty, and researchers joined the burgeoning "alternative food movement." In 1971, the garden program branched out onto an additional 17-acre plot down the hill. The formal six-month, residential Apprenticeship in Ecological Horticulture was born, a certificate program offered through UC Extension, and the new acreage meant the program could expand to include tractorbased farming for the first time. "The UCSC Apprenticeship Program is the original innovator of farmer education in sustainable agriculture," says Kathleen Merrigan, former deputy secretary and chief operating officer of the U.S. Department of Agriculture and now the executive director of sustainability at George Washington University. "Its graduates are everywhere in the field of sustainable food systems."

The program grew, and graduates of the apprenticeship fanned out to start their own organic farms and gardens. Word spread, and applications poured in from across the country—as well as Canada, Africa, Mexico, and South America.

Meanwhile, the increased acreage also accommodated scientific research trials. Center researchers partnered with local farmers to pioneer ways to grow crops like apples, artichokes, and strawberries without hazardous fumigants, pesticides, and weed killers. Interest continued, and the Center for Agroecology and Sustainable Food Systems was established, formalizing the nation's first university-based program in agroecology, a scientific approach that emphasizes the ecology of farming systems.

Launching a Movement

Training farmers and "greening" food production wasn't enough, though. As part of its commitment to enhancing the viability of small farms, the Center nurtured the "community supported agriculture" model in which members "invest" in the farm upfront, giving growers a guaranteed income at the start of each season. Staff share their expertise by writing organic crop-production training manuals on key crops--and distributing them free online. And they worked to broaden agricultural policy to include issues of social justice and worker welfare, bringing wages, working conditions, and the tragedy of farmworkers who go hungry into the conversation.

"The central coast of California is the capital of organic agriculture in large part because of UC Santa Cruz," says Press. "This university championed organic farming before anyone else, training farmers and raising public awareness about the environmental significance of growing food without synthetic chemicals. Today, the Center is broadening the definition of sustainability to encompass the well being of people as well as the environment. We need its leadership now more than ever."

Although undergraduates launched the garden program, over the years a relatively small portion of students tapped the Center's educational opportunities, although some took advantage of internships, independent study programs, and field study. With Press's arrival as executive director in 2012, the Center began strengthening ties with the campus's academic programs. Today, hundreds of students partake of the smorgasbord of experiential learning opportunities, including classes with labs at the Farm and Chadwick Garden. Students can choose a concentration in agroecology and sustainable food systems

Fall Calendar

Fall Harvest Festival/Tour at the UCSC Farm

Sunday, October 1, 11:00 am - 5:00 pm

Join us to celebrate the fall harvest with a fun-filled day on the UCSC Farm! See the details, next page. Note that the monthly free first Sunday farm tour will take place at 4 pm to coincide with the tour offered at the festival.

Hay Barn Open House/Farm Tour

Saturday, October 21, 2:00 pm – 5:00 pm Farm Tour at 3 pm

As part of the annual Founders Day celebrations, come see new displays about campus land use, and learn about this unique building's history and its new role as CASFS headquarters. A farm tour leaves from the Hay Barn at 3 pm. We look forward to seeing you!

Fall Birding Walk on the Farm

Saturday, October 28, 9 am – 11 am

Join us for an introductory birding walk at the UCSC-Farm with natural history instructor Breck Tyler. This guided walk will feature a leisurely pace with frequent stops to observe, identify, and appreciate the local birds and their interesting behaviors. All levels of birding experience are welcome. Bring binoculars if you have them. Pre-registration costs: \$10 general public, \$5 Friends of the Farm & Garden and limited income, free for UCSC students. Please pre-register at: birdfarm2017.bpt.me

Last Day of 2017 Market Cart

Tuesday, October 31, 12 pm - 6 *pm Corner of Bay* & *High Streets, base of the UCSC campus*

Don't miss your last chance to shop at the Farm & Garden's Market Cart stand for the 2017 season. Pick up an organically grown pumpkin for carving or eating (or both!) along with some delicious fall produce and a fall bouquet.

Also coming up –

Dining for Farmers Dinner Series at Assembly (September 27) and Shadowbrook (October 11), details at news.ucsc.edu/2017/08/casfs-dining

UCSC Arboretum Fall Plant Sale, October 14, details at arboretum.ucsc.edu

Annual Meeting of the Friends of the UCSC Farm & Garden

Wednesday, November 1, 6 pm – 8 pm Cowell Ranch Hay Barn, UC Santa Cruz

The Friends of the Farm & Garden Board of Directors is delighted to invite you to come as our guest to savor delicious hors d'oeuvres and the good company of other Friends and supporters. Complimentary wine bar.

Hear about Farm & Garden 2017 highlights and plans for the upcoming year. Current Friends' members may vote for the slate of Board Officer nominees and by-law changes. RSVP is required. RSVP to dandion1@me.com by October 26 (please put "Friends RSVP" in the email subject line and include your email address and phone). Or RSVP by phone to 831.459-3240.

Grow Great Garlic! Cultivating Organic Garlic in the Home Garden

Sunday, November 5, 9:30 am – 12:00 pm Cowell Ranch Hay Barn

Attention garlic lovers! Join us for a special workshop led by garlic farmer Pete Rasmussen of Sandhill Farms in Eden, Utah, and Orin Martin of the Alan Chadwick Garden. Pete and Orin will discuss the ins and outs of selecting, planting, growing, harvesting, and storing organic garlic.

Cost: \$20 for Friends of the Farm & Garden members (pre-registered) or \$30 (at the door); \$30 general admission (pre-registered) or \$40 (at the door); \$15 for UCSC students and limited-income (pre-registered) or \$20 (at the door).

Learn more and sign up at: garlic2017.bpt.me. This workshop takes place rain or shine!

Free Guided Tour of the UCSC Farm

Sunday, November 5, 2 pm – 3:30 pm UCSC Farm

Join us for the final monthly tour of the 2017 season. Enjoy a fall stroll on the 30-acre organic UCSC Farm and learn about the research, education, and community outreach projects taking place. No registration necessary; meet at the Louise Cain Gatehouse, just inside the Farm's entrance. Heavy rain cancels.

If you'd like more information about these events, need directions, or have questions about access, please call 831.459-3240, email casfs@ucsc.edu, or see our web site, casfs.ucsc.edu. Co-sponsored by CASFS and the Friends of the UCSC Farm & Garden.

Fall Harvest Festival at the UCSC Farm October 1, 11 am - 5 pm

Join us on the 30-acre UCSC Farm to celebrate the fall harvest season! Enjoy live music, kids' activities, great food, an apple pie baking contest, talks, tours and more at our fall open house event.

\$5 general admission; free for UCSC students, kids 12 and under, and members of the Friends of the UCSC Farm & Garden.

Music

- FSWG Student Favorites, 11:15 12:30
- The Down Beets, 12:45 2:00
- Makru, 2:15 3:30
- Ancestree Reggae, 3:45 5:00

Workshops & Activities

- Apple Variety Tasting, 11:30 4:30
- Seasonal Salsa Making, 12:00 1:00
- Apple Pie Contest Bake-Off (entry deadline), 12:30
 UCSC Farm Tours (4pm tour includes Hay Barn),
- 12:30 and 4:00
- Sourdough 101: Sourdough Bread Making, 1:15 – 2:15
- Herb Talk & Walk with Darren Huckle, 2:00 3:00
- Growing & Making Cut Flower Bouquets, 3:00 – 4:00
- Seed Saving Workshop, 4:00 5:00

Plus hay rides, kids' crafts, face painting, yummy food, treats from Penny Ice Creamery, UCSC Farm organic produce & flowers,fresh-squeezed apple juice, bike smoothies, "Food, What?!" sunflower fundraiser, and more!

Chadwick Online Library & Archive Website Launched

The Alan Chadwick Living Library & Archive (chadwickarchive.org) was created to share the life, work, vision and legacy of English master horticulturalist, Alan Chadwick (27 July, 1909 – 25 May, 1980) and for historical, educational and research purposes.

The new website, created by Craig Siska, includes a brief history of Alan's time at UC Santa Cruz, where he developed the Student Garden Project (now the Alan Chadwick Garden), and describes the gardens he founded after leaving UC Santa Cruz. You can enjoy photos, transcripts of lectures, and much more at this beautiful new website.

According to the site, "Chadwick's infuence can be seen in gardens all across North America and internationally as well. Thousands of gardeners have adopted his basic approach, techniques, and horticultural practices."

Field Report from the Rose Selection & Care Workshop August 19, 2017

Garden manager Orin Martin arrived to the Chadwick Garden chalet on a foggy morning with an armful of roses just picked from the garden's bountiful three acres on the slopes near UCSC's Merrill College.

He dove right in: roses have "prickles" rather than "thorns," followed by a Howard Zinn quote on being hopeful in bad times. The takeaway: plant flowers, as many as possible, and rise to the challenge of planting roses on the Central Coast – not for the faint of heart.

Orin masterfully guided us to know which flowers are best suited to this climate, and how one can become a master steward of a flower garden beginning with how to prepare soil, where to buy bareroot and rose bushes, where and when to plant them, how to obtain soil tests, drip irrigation, soil amendments, insecticides and fungicides.

In celebration of this year's 50th anniversary of Alan Chadwick's legacy, now fostered by CASFS, 125 new rose bushes purchased with funding from the Friends of the Farm & Garden were planted in the Chadwick garden – hybrid teas, grandifloras, and floribundas, as well as David Austin roses. Alongside this stunning and fragrant canvas, Orin demonstrated how to plant a rose bush, as well as how to prune and deadhead, promising to bring us back in the winter for a follow-up class on rose care.

New Series of Organic Grower Guides Available

A new series of technical guides developed at UC Santa Cruz targets small- and medium-scale organic specialty crop growers with the production information they need to be successful.

The 4- to 12-page guides developed by UCSC's Center for Agroecology & Sustainable Food Systems (CASFS) address high-value vegetable and cut flower crops grown by many small- and medium-scale farmers. The guides outline basic techniques for tillage, planting, irrigation, weed control, harvesting, and pest and disease control, as well as production schedules and economic data.

The Grower Guides series is available to download for free from the CASFS website, casfs.ucsc.edu/ about/publications/grower-guides. At this site you will also find videos produced by CASFS at the UCSC Farm on organic weed management, as well as on incorporating cover crops and preparing planting beds.

New Perennials Grace Persimmon Slope

Next time you visit the UCSC Farm, be sure to check out an often-overlooked corner to see the latest perennial plantings. The new plantings are located on the "persimmon slope," just below the persimmon trees to the west of the Farm Center.

Here Kellee Matsushita and Christof Bernau, who manage the flower production efforts at the UCSC Farm, are putting in plants that will grace the Farm's flower bouquets next season. As Bernau explained, "Our goal is to increase the diversity and seasonal abundance of flowers and foliage to use in our cut flower operation, both in bouquets for our market cart shoppers and flower CSA members, and to offer for weddings and special event work."

The new plants also provide teaching and demonstration materials for participants in the annual Apprenticeship training course and the undergraduate students taking courses and doing internships at the UCSC Farm, as well as the many public tours and other visitors to the farm.

Teaming up with this year's Apprentices, Bernau and Matsushita have planted out three types of perennials, with more planned to go in later this season. To date the plantings include:

Kangaroo Paws, Anigozanthus 'Regal Velvet', 'Ruby Velvet', and 'Yellow Gem'

These fuzzy-flowered evergreen plants from southwest Australia are well suited to the Central Coast's Mediterranean climate—once established, they can get by on minimal summer irrigation.

The team planted out 2 rows, the first a split row of 15+ each of 'Regal Velvet' and 'Ruby Velvet,' and a second row of 30+ plants of 'Yellow Gem', with the plants placed 3 feet apart in the rows. These cultivars have open architectural lines that add interest to bouquets, and a bloom season that stretches from late spring into early fall.



"As cutting flowers, you can cut them to the ground or to a node midway along the branch, and they will regrow from nodes farther up," said Bernau.

He explained that you can also prune kangaroo paws one of two ways: in late

winter, shear them back the way you would a perennial grass or iris to 4–5" above ground, or do some selective cutting to remove older growth and the oldest "fans." They should prosper for 5 to 7 years before needing to be divided to maintain vigor.

Kangaroo paws are generally available in late September and early October and again in the spring from local nurseries including The Garden Company, San Lorenzo Garden Center, and Sierra Azul. Pink and orange cultivars of Anigozanthus have also been planted in the perennial border that edges the main garden.

Ninebark, Physocarpus opulifolius

The common name of this drought-tolerant Physocarpus refers to the mature plants' bark, which peels away in strips. This rose family shrub grows 5-6' tall, and makes a wonderful soil-holding hedge that can be used to control erosion on banks.

Again, the goal with the UCSC Farm's new plantings is to produce interesting foliage and flowers for bouquets that will stretch the harvest window from spring into the fall and early winter.

The persimmon slope plantings include the 'Diabolo' cultivar, which has reddish-brown bark and, said Bernau, "... really nice dark red foliage, plus big clusters of pinkish-white, five-petaled flowers that grow in dense, rounded clusters."

They also planted the cultivar 'Coppertina', which has bronze-orange foliage early in its growth cycle that matures to a dark burgundy, with clusters of showy white flowers.

The plants were placed 6' apart in a single line to accommodate their eventual spread to 5–6' wide. During their winter dormancy, they should be pruned hard, and can provide limited divisions if you wish to increase your stock on your own.

Eryngium, Sea Holly

As you wander the Farm, look for new plantings of Eryngium, also known as Sea Holly, at the southern

edge of the main garden near the blueberries.

Despite its common name and somewhat spiny nature, Eryngium isn't a holly, but a member of the Apiaceae family (home to carrots,



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The "First 50" Gathering at UC Santa Cruz

See casfs.ucsc.edu/about/50th/first50 for a "scrapbook" of photos, videos, and transcripts from many of the 50th Anniversary event activities

From the first volunteers to arrive for the rock wall workshop in the Chadwick Garden to the last van to pull out of the Hay Barn parking lot for field trips to Apprenticeship alumni farms, the four days of the "First 50" celebration were full of shared memories, inspirational talks and stories, joyful reconnections, and hugs, hugs, and more hugs. It was amazing to see more than 800 of the "extended family" of the UCSC Farm & Garden and the Center for Agroecology & Sustainable Food Systems (CASFS) reunite to honor the work of creating a healthier, more just food system over the past five decades. It's difficult to do justice to such an inspiring gathering, but here we take a brief look back at the celebration and some of its highlights, and offer thanks to the many supporters who helped make the event possible.

Rock Walls and Memories

It started in the garden on Alan Chadwick's birthday: on Thursday morning eager volunteers streamed into the garden to help clear the foundation for rebuilding the signature rock walls of the Chadwick Garden, using native marble from the campus quarries. Matthew Sutton, a 2003 Apprenticeship graduate and founder of Orchard Keepers, led the workshop and subsequent rebuilding efforts; look for more about the rock wall project in the next *News* & *Notes*.

That evening the garden chalet's deck was transformed into an elegant outdoor dining room, with white tablecloths and resplendent flower bouquets cut from



Clearing the way for rebuilding one of the Garden's rock walls.

the abundant garden beds. Beth Benjamin, one of the original Chadwick apprentices (and co-founder with Jim Nelson of Camp Joy in Boulder Creek) had gathered up a cohort of the original apprentices for the evening—some of whom had not seen each other since their student-apprentice days—who helped Chadwick develop the garden and later, the UCSC Farm. Between delicious courses prepared by long-time supporter Ristorante Avanti, they shared stories and memories of the man who drew them to the garden—his generosity, his sometimes cantankerous temperament, and his passionate belief in working with nature to create the magical setting that has inspired so many through the past 50 years.

Friday Reception and Stories

On Friday afternoon, more than 330 alumni, students, Friends' members, staff and faculty gathered in the Ocean View field at the UCSC/CASFS Farm to enjoy fantastic food prepared by Feel Good Foods catering, owned by Apprenticeship graduate Amy Lindstrom Padilla and her partner Heidi Schlecht, and started by alum Britt Galler.

California Assemblymember Mark Stone opened the reception program by presenting a California resolution "recognizing the 50 years of superior teaching, research, training, and public service provided by the Center for Agroecology & Sustainable Food Systems and its campus Farm and Alan Chadwick Garden." CASFS Executive Director Daniel Press lauded Orin Martin for his amazing 40 years of teaching and gardening, Chadwick Garden manager Orin Martin acknowledged the many groups of people over the years who have kept the Farm & Garden alive and thriving (right up to the current cohort of apprentices), and garden assistant manager Kellee Matsushita talked about new CASFS initiatives to expand the scope and audience of the apprenticeship with the goal of increasing the social justice component, including the new Food Justice & Equity Scholarship.

UCSC faculty and CASFS staff members then led tours of the Farm's research, teaching, and production fields to bring everyone up to date on all aspects of CAS-FS activities. As the tours wound down, people streamed down the hill to the Hay Barn's parking lot for an al fresco dinner from Uncie Ro's Pizza and farm-fresh salad served up by the teens from the "Food, What?!" youth empowerment program, an effort founded by Apprenticeship graduate Doron Comerchero.

As daylight faded, the crowd flowed into the Hay Barn decorated with pictures from throughout the past fifty years for a "story slam" hosted by garden assistant manager Ella Fleming. Storytellers shared tales both funny and inspiring, from kidnapped cat adventures and dry-farmed tomato wars, to heartfelt gratitude for their experiences at the Farm & Garden and the impact on their lives.



Assemblymember Mark Stone presents a California resolution acknowledgin five decades of research, education, and public service.

An Action-Packed Saturday

The fog lay thick and dripping on the Chadwick Garden for Saturday morning's "fog rise" gathering, but that didn't deter the many who arrived for an early breakfast hosted by the Friends of the UCSC Farm & Garden before making their way past laden apple trees and tidy rows of peppers to gather on the garden paths between the roses blooming in every shade. There Val Lopez, leader of the Amah Mutsun tribal band, opened the morning's ceremony with a blessing on the land and the many who have tended it through the centuries, reminding us of our responsibility to the earth and to each other. Native American poet Steve Meadows read his work, Audrey Stanley, founder of Shakespeare Santa Cruz, shared Alan Chawick's favorite Shakespeare Sonnet (#15, "When I consider everything that grows ..."), and former Shakespeare Santa Cruz director Paul Whitworth followed with a moving rendition of the poem "The Seed Shop," by Muriel Stuart.

David Robles, a member of the 2017 Apprenticeship class, then performed his inspiring spoken word work (check out the video; see above for the link), and 1967 apprentice Beth Benjamin shared her memories of working with Alan Chadwick in the Garden and the impact he had on her life. Aaron de Long, a 2003 Apprenticeship graduate, read his moving piece on "Becoming a True Apprentice"—a short excerpt: "Trees don't read books, So learn to read trees, instead, Become fluent in roses, Memorize the radicle emergence of seeds, Hum the tunes to which the bees dance."

After the most recent crop of apprentices stepped up, "popcorn" style, to share some of the things it takes to be a good gardener, Orin took the stage to reflect on the Garden's history and the inspiration he gets from those who are fired up about doing good work in the world: "I love the way energy shimmers of the ocean in waves. I also love the way it shimmers off the most motivated and driven people."

And with his final shout out to Daniel Press's leadership—"Folks, we are in good hands!"—echoing through the trees, the crowd made its way across the street to the Stevenson College Event Center.

There, the next morning session focused on the "ripple effect" created by Apprenticeship alumni now involved in their own educational programs. A beautiful video about the Farm & Garden's history produced by Impact Creative studio opened the session. Darryl Wong donned his "many hats" as apprenticeship graduate, UCSC alum, and current CASFS staff member and UCSC graduate student to talk about the research, education, and outreach work of CASFS today.

Saskia Cornes, farm manager at Duke University followed with her story of creating Duke's campus farm and the programs she has initiated in concert with faculty to introduce students to both the scientific and social issues associated with agriculture. Albie Miles, who founded the University of Hawai'i, West Oahu's program in Sustainable Community Food Systems, described the unique "pipeline" that brings high school and community college students to the university through efforts at MA'O organic farms, and the program's efforts to establish a regional food system on an island that currently imports more than 90% of its food.

Nancy Vail and Jered Lawson, founders of Pie Ranch educational farm, read from their chapter in the recently published compilation, Letters to a Young Farmer, and talked about the successes and struggles of trying to create a more just, sustainable food system. Finally, Karen Washington talked about her time as an apprentice, her work to bring healthy food and farming to her Bronx neighborhood and other underserved communities through the Black Urban Growers group that she founded, and the



Chadwick Garden manager Orin Martin speaking at the "Fog Lift."

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collaborative Rise and Root farm she has started with several other former apprentices..

Following lunch, CASFS staff members Tim Galarneau and Nancy Yang described the ongoing work to increase the amount of "real food" on college and university campuses, and develop food access programs that ensure all students are food secure. Participants then picked from a smorgasboard of CASFS faculty-, staff- and alumniled workshops. Topics ranged from pollinators garden illustration, berry production, and seed saving, to fruit trees, marketing, bouquet making, working with children and teens, a Q&A on farming and farm equipment, and a discussion of creating culture and belonging on a UC Student Farm. The People of Color (POC) alumni group also led a workshop to introduce the new Farmers of the Global Majority website.

There was hardly time to take a breath before Saturday evening's banquet opened with a wine tasting in the Hay Barn, where Pam Storrs of Storrs Winery and Vineyards hosted a regional terroir gathering featuring Storrs, Beauregard Vineyard, and Santa Cruz Mountain Vineyard. The 500 dinner guests then gathered at long tables graced with flowers and colorful graphic placemats depicting the sources of the evening's meal.

CASFS Director Daniel Press welcomed the group, thanked everyone for their support, and inspired people to reflect on the hopeful model that the Farm & Garden has been and will be for the future. Chancellor Blumenthal added his appreciation for the work of so many through the decades.

The dynamic duo of chef Alice Waters and chef/ farmer (CheFarmer) Matthew Raiford took the banquet stage next. Matthew Raiford told the story of his journey from the military to the Culinary Institute of America and back to the family farm in Georgia. That journey brought him to do the Apprenticeship in 2011 where he started the annual Farm to Fork Benefit Dinner and came to see the CASFS apprentices as changemakers fanning out across the country to bring the message of sustainable agriculture and food systems to different regions.

Famed chef and restaurateur, Alice Waters, warmly recounted early connections between the organic farming training at UCSC and her renowned Chez Panisse restaurant started over 45 years ago, inviting us all to continue the delicious food revolution by building what she called a school-supported agriculture movement.

After dinner the party continued, with Doron Comerchero spinning tunes as the Hay Barn filled with music, laughter, and dancers from across the decades. If it weren't for the 10 pm curfew (out of respect for the Hay Barn's neighbors), there's no doubt the music and dancing would have gone on into the wee hours.

Sunday Closure

Sunday morning started with breakfast in the Hay Barn and a short film showing footage of the Garden from



Alice Waters and Matthew Raiford at the Hay Barn Banquet.

1970 produced by Michael Stusser, an apprentice with Chadwick at that time. Steve Kaffka and Pierre Ott, both pivotal figures in the early days of the Farm & Garden, then showed slides and recounted the process of bringing the projects through their earliest years, including the first formal Apprenticeship classes that Steve and Pierre directed. Following breakout sessions, the group gathered for a closing circle on the Farm led by garden manager Christof Bernau to share inspirations and final thoughts.

The celebration closed with lunch, last hugs, and field trips to Pescadero-area farms started by Apprenticeship graduates—Blue House, Fifth Crow, and Pie Ranch, impressive examples of the skill and hard work of their founders.

The "First 50" was an amazing gathering and an affirmation of the love and dedication that have made the Farm & Garden/CASFS such vibrant, impactful places and programs for thousands of people over the years. The project that started on a steep hillside of a fledgling UC campus has blossomed into an ever-evolving effort to create a more just, sustainable food system. The event brought together the generations to celebrate, reflect, and get inspired to continue their work to create a better world, exemplifying the words of garden champion and founding faculty member Page Smith in his eulogy for Alan Chadwick—

"We will find his spirit in the gardens he or his disciples built, exhorting us to do better, to care more, to work harder, to recklessly expend love on an intractable world, to make the world a garden."

Orin Martin on some of the Farm & Garden's early supporters

It seems appropriate the garden came into being early in the UCSC campus "construction." The campus was conceived by founding chancellor Dean McHenry and his "posse" as offering contrarian perspectives on a UC education, with an emphasis on teaching and small-scale/human-scale intellectual and social life.

We all owe a debt of gratitude to the people who exhibited vision, integrity, and a deep commitment to higher education in those early years. The Farm and Garden would not have come into being, or continued to exist without the likes of founding chancellor Dean McHenry, vice chancellors Hal Hyde, Elizabeth Penant, professor Stanley Cain and Louise Cain, founder of the Friends of the Farm & Garden, professor Ken Norris and Phyllis Norris, professor Page Smith and Eloise Smith, professor Paul Lee, and a host of others academics and administrators.

They found ways to "aid and abet," and helped us navigate the rocky shoals of the institution. For while the Apprenticeship, and the Farm and Garden by extension, never really fit into the rubric of UC (a research-based institution), we were always able to establish relationships that often evolved into true friendships with "people in the know," forming unlikely alliances between button-down types and a bunch of dirt gardeners. What is that old adage about history—one catastrophe after another, war followed by war, outrage by outrage, almost as if history were nothing more than all the narratives of human pain, assembled in sequence. But history is also the narrative of grace, the recounting of those blessed moments, moments when someone did something for someone else—bestowed a gift, gave something that was beyond what was required by circumstance. In "our" history, we have always been lucky enough to find the "gift givers," those to whom we entrusted our well being, even continuance (present company of CASFS executive director Daniel Press and assistant director Audries Blake included.)

Thank You for Your Support!

The "First 50" celebration would not have been possible without the generous support of the following donors. Thank you so much for helping make the event a success!

Harvester and Visionary

- Bon Appétit Management Company
- Earthbound Farm
- Friends of the Farm & Garden
- SunRidge Farms
- Veritable Vegetable

Seed Sower

- Clif Bar
- Feel Good Foods
- Heath & Lejeune
- Kingbird Farm
- Lakeside Organic Gardens
- Organic Valley
- Simply Organic
- Tend
- UNFI

Cultivator

- Acre Gourmet
- Bragg Live Food Products
- California Certified Organic
- Farmers (CCOF)
- Cen-Con
- County Line Harvest
- Earl's Organic Produce
- Meg Cadoux Hirshberg
- Orchard Keepers
- Osmosis Day Spa
- Renee's Garden Seeds

Sustainer

- A&A Organics
- Bay Federal Credit Union
- Beauregard Vineyards
- California FarmLink
- Chromagraphics
- Coke Farm
- Companion Bakeshop
- Discretion Brewing
- Fogline Farm
- Grimmway Farms
- Lagunitas Brewing Company
- Live Earth Farm
- Martella Wines
- Phil Foster Farm
- Santa Cruz County Farm Bureau
- Santa Cruz Mountain Vineyard
- Santa Cruz Seed
- Sones Cellars
- Staff of Life
- Storrs Winery and Vineyard
- TomKat Ranch
- Tradin Organics
- Verve Coffee Roasters



Steward

- Bock Wine and Spirits
- Bonny Doon Vineyard
- Canewater Farm
- Clover Sonoma
- Condor's Hope
- Elizabeth Quinn, M.S., D.C.
- Fetzer Vineyards/Bonterra Winery
- Frey Vineyards
- Frog's Leap
- S. Martinelli & Co.
- Mountain Feed and Seed
- Odonata Wines
- Palace Arts
- Swanton Berry Farm

Many thanks to the following restaurants for supporting the CASFS Farm & Garden Apprenticeship through their **Dining for Farmers** benefit events –

- Ristorante Avanti, August 23
- Gabriella Café, August 30
- La Posta, September 6
- Soif Restaurant & Wine Bar, September 13
- Ella's at the Airport , September 20
- Assembly, September 27
- Shadowbrook, October 11



Research on alternatives to methyl bromide taking place at the UCSC Farm has led to widespread adaptation by strawberry growers.

Growing Farmers & the Food Movement (from page 2)

offered by the Environmental Studies Department, and Press would like one day to offer a major in agroecology.

UC Santa Cruz is not a land-grant campus, so it's not one of UC's "ag schools," but that hasn't kept the Farm from becoming a busy research site that channels millions of federal dollars into efforts to improve crop production, soil health, and the sustainability of food systems.

"The big ag schools solve problems for the agriculture industry in their region," says Press. "Our niche is to solve the problems of organic production. Thirty percent of agriculture in Santa Cruz County is certified organic." Nationally, demand for organic food climbs steadily; in 2015, nearly 13,000 certified organic farms produced \$6.2 billion in commodities, according to the U.S. Department of Agriculture. California leads the way with \$2.4 billion in sales—40 percent of total U.S. certified organic sales.

Among the signature achievements of the Center's research program is the development of strategies to produce strawberries without harmful soil fumigants like methyl bromide. In the early 1990s, faced with the phase-out of methyl bromide, conventional growers literally said it couldn't be done—and then Center researcher Sean Swezey and Environmental Studies Professor Steve Gliessman did it, collaborating with Jim Cochran of Swanton Berry Farm. That breakthrough led to more research by Environmental Studies Professor Carol Shennan and research scientist Joji Muramoto. Their approach focuses on anaerobic soil disinfestation, a clever strategy that uses short-term field flooding and organic matter to create a temporary environment that kills off harmful soil pathogens prior to planting.

The Center's leadership is evident across the UC system, where CASFS representatives, led by food systems researcher Tim Galarneau (Rachel Carson College '05, psychology), spearheaded UC's systemwide adoption of 20 percent "real food" purchases, driving the university's commitment to buy food that is produced in a fair, humane, and environmentally sustainable manner. UC Santa Cruz is committed to purchasing 40 percent "real food" for its dining halls and other food facilities by 2020.

The Center's reach extends to K–12 partners, as well. Affiliates are working to improve K–12 school nutrition programs through partnerships with 15 school districts in Monterey, San Benito, and Santa Cruz counties. The Farm is also home to Life Lab, the oldest garden-based K-12 education program in the country; Life Lab brings more than 2,000 students to the Farm every year. And Food What?! is a Farm-based youth-empowerment program that uses farming, gardening, and cooking to build life and career skills.

The 'People's Farm'

Fifty years after it all began on that steep hillside across from Stevenson College, the apprenticeship continues to attract applicants from across the country and around the globe. Only one in three are admitted—a higher ratio than years past as programs around the country have copied the apprenticeship model, says Press.

"This model seems to appeal to people," adds Press, noting that the average age of farmers in the U. S. is 57. "Most of our apprentices don't come from farm families."

The lucky 39 who are selected each year get an education like no other: Apprentices receive 700 hours of field instruction and 300 hours of classroom learning over the course of six months, covering everything from seed propagation to tractor cultivation. This year's cohort includes educators, urban farmers and gardeners, youth empowerment advocates, three graduate students, and several recent college graduates. Apprentices hail from California, Oregon, Washington, Arizona, North Carolina, and South Africa.

Current apprentice David Robles is a recent graduate of UC Santa Cruz (History, 2016). As a student, he focused on social movements—and feels today that he is in the midst of an important one.



Elementary school students enjoy a Life Lab field trip to the Farm.



Hay Barn visitors explore an exhibit on Apprenticeship graduates' work during the 50th Anniversary "First 50" celeb

"Food affects everybody," says Robles. "Everybody's got to eat, so food is a great way to put environmentalism at the front of people's minds."

But the Center's mission is bigger than just the environment. "When you pay a couple dollars more for organic, locally grown food, you get a couple dollars of justice for the people who grow, process, and distribute your food," says Robles, who plans to work with youth after the apprentice ends in October.

"Youth education is the way to build a movement that revolves around sustainability and empowering people," says Robles, who enjoys the tangible rewards of working the soil—particularly in an era when threats like climate change can feel overwhelming. "It's a very hands-on approach to making the world a better place. The Center has come a long way over 50 years. It was just about organic gardening, and now it's about the global economy and the global ecosystem. It has gone from a technique to a social movement."

'Grow our own food? That's slavery!'

Apprenticeship graduates carry the mantle forward as farmers, teachers, urban gardeners, community organizers, policy makers, directors of nonprofits that serve veterans and the incarcerated, and more. Karen Washington, a 2008 graduate of the apprenticeship, is a lifelong community activist and a champion of food justice. A co-founder of Black Urban Growers (BUGS) and Rise and Root Farm, located an hour north of New York City, Washington focuses on giving people equal access to soil, whether they are in the Bronx or the suburbs, rich or poor, high school dropouts or Ph.D.'s.

"To grow your own food gives you power and dignity," says Washington, who lives in the Bronx. "For so long in the inner cities, there was a disconnect between where your food was coming from and who was growing it, because of the convenience of going to the supermarket."

Giving urban dwellers the opportunity to grow their own food is empowering—but not all are initially receptive. "Whites embrace it, but for low-income and people of color, they hear 'Grow our own food' and say 'That's slavery!'" says Washington. "We have to understand that narrative to be able to reshape it. Same with valuing land."

Many blacks fled the South, vowing never to go back. But Washington wants to restore the legacy of those agrarian connections and the culture of agriculture. "When I was in Santa Cruz, it really started to sink in," she recalls. "Looking at the landscape in California, I saw this whiteled food movement, and I asked, 'Where are the farmers who look like me? Where are the black farmers? Where are the people of color in the food movement?'"

After she finished the apprenticeship and returned to New York, Washington reached out, hosting a first-ever conference of black farmers. Since that initial gathering in Brooklyn in 2010, the Black Farmers and Urban Gardeners Conference has become an annual meeting, taking place this year in Atlanta. "The conference is a place for people of color to connect and to understand that slavery is part of the American experience, but it doesn't define us as a people," says Washington. "The apprenticeship gave me the experience to see the lack of diversity in the farm movement."

And like hundreds of others, Washington emerged from the apprenticeship with a vision she put in to action.

Back on the campus Farm, Daniel Press says it's tempting to sum up the impact of 50 years with data points about organic farming or sustainable agriculture, but the campus's greatest impact has always been its people. Today, as ever, the Center produces leaders.

"Fifty years ago, I don't imagine the students who transformed that hillside into a lush garden thought of themselves as visionaries, but they were," he says. "We carry on their legacy today, working toward an environmentally sound, socially just food system. And there isn't a prettier, tastier, better way to do this than the way we are doing it at UC Santa Cruz."

This article originally appeared on the UCSC News website. See more 50th Anniversary coverage, including a wonderful video about the Farm & Garden's history, at casfs.ucsc.edu/ about/50th/media-resources #119 University of California Santa Cruz Center for Agroecology & Sustainable Food Systems 1156 High St. Santa Cruz, CA 95064 Nonprofit Org. U.S. POSTAGE **PAID** Santa Cruz, CA Permit No. 32

Early Supporters (from page 9)

The Farm and Garden have a long tradition of people doing something for other people, people they may never know. Think of the evolution of: the soil, the cropping systems, the curriculum, infrastructure, rock walls, the Farm Center, greenhouses, the solar shower, trees, trees, trees... The 50th anniversary celebration was an opportunity to get to know the cohorts from 1967-2017 (!). But we should be especially respectful of Alan Chadwick and both his legacy and his initial apprentices from 1967–71, including Beth Benjamin, Jim Nelson, Steve Kaffka, Steve Decater, Phyllis Anderson, Michael Stusser, Nancy Lingemann, Dennis Tamura, and Michael Zander, to name just a few. They and many others in those early years were the cohort that engaged turning first, a foreboding and clay-ey poison oak-infested hillside into a bit of paradise, and subsequently the sandy-sieve-y soil of the Farm into a thriving entity!

We owe them a debt of gratitude for their work, the real work. Or as poet Marge Piercy writes in To Be of Use:

"The work of the world is common as mud. Botched, it smears the hands, crumbles to dust. But the thing worth doing well done has a shape that satisfies, clean and evident. Greek amphoras for wine or oil, Hopi vases that held corn, are put in museums, but you know they were made to be used. The pitcher cries for water to carry, and a person for work that is real."

New Perennnials (from page 5)

parsnips, dill, and fennel, amongst many others). This long-lived perennial shares the umbel-shaped flower structure of all Apiaceae, with small flowers radiating from a single stem. And like the Physocarpus described above, it's a wonderful source of nectar and pollen for beneficial insects.

Plan for Planting This Fall

Bernau encourages gardeners who are thinking about planting perennials to prepare now, even if you're not quite ready to put plants in the ground. "The more early ground preparation you can do, the better," he says.

That preparation includes thorough, deep cultivation to get your planting sites ready, and applying compost and any supplemental fertility you might need, based on soil tests.

"Once the plants are in the ground, you don't have that easy access to the soil and root zone," he said. "Since we can't predict when the winter rains might arrive, make sure new plantings have access to the irrigation they'll need to get established." Local nurseries should have these and other offerings well suited to our climate and its microclimate, and should also be able to suggest many other possibilities. As more perennials for beauty, habitat and cut flowers appear on the farm, we will keep you updated.