



News & Notes of the UCSC Farm & Garden

Issue 162, Fall 2019

Center for Agroecology
& Sustainable Food Systems

The Dawn Patrol - by Manjula Martin

Every morning, my dad gets up before sunrise and makes a lot of coffee, some of which he drinks immediately and some of which he reserves in a pint glass on the counter for later reheating. He then selects a yellow legal pad from the stacks of papers and books that litter the kitchen table, grabs a cheap ballpoint pen, and sits at the table and writes. This is before he reads the sports pages, before he loads his bike panniers up with dog-eared horticultural tomes and sheafs of scribbled-upon notepads and rides up the hill to the university; before he walks the paths of the garden alone to see what's been happening with the plants overnight; before he witnesses the insects become visible as the fog lifts and the birds descend; before he waters the seedlings in the greenhouse or prepares and writes the day's orchard tasks for the apprentices on the chalet chalkboard in vigorous all-caps; before he stands on a sloped hillside in running shoes and shorts all day, teaching hopeful farmers how to grow stuff, until the fog comes back.

Recently my dad's first book, *Fruit Trees for Every Garden*, was released, which I cowrote with him. From the book:

Our allies in the insect and avian world are particularly evident early and late in the day. Dawn and dusk. The crepuscular hours. As both poets and biologists tell us, these are times of heightened biological activity. Many varying demographics such as surfers, birders, naturalists, anglers, and hunters pursue their passions in the early light. Surfers refer to this as the dawn patrol.

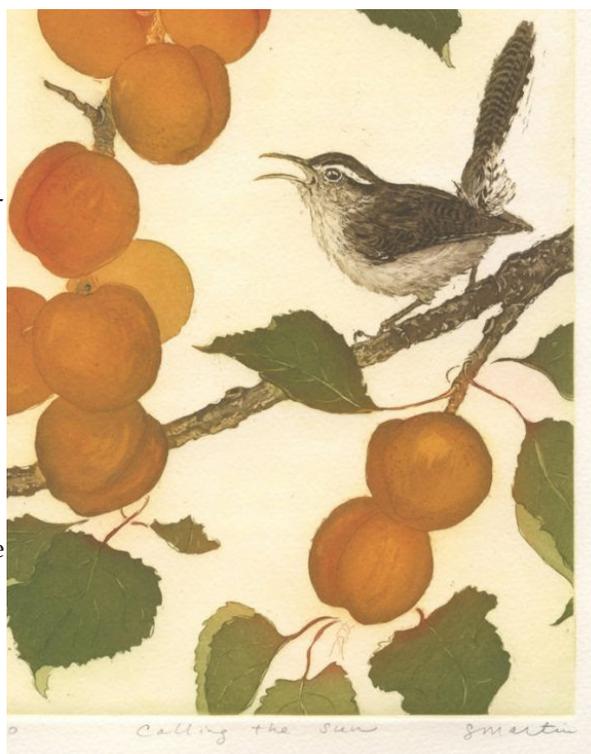
One of the pleasures of my life is the almost daily, early-morning walkabouts in our fields, gardens, and orchards. I find these to be synergistic times of both reflection and technical insight—a time of alchemy, inspiration, and profound humility that helps integrate science and spirit on a daily basis.

On a more practical basis, the dawn patrol is about honoring the dignity of our physical labor—noticing what needs to be done and then doing it in a timely manner. “

All of my parents taught me to read and write and understand the world through its own varied modes of expression. Collaborating with my dad on his book taught me to honor the dawn, and the work, in all the ways they show up.

Also, how to grow fruit.
I hope it does the same for you.

xo
-m.



“Calling the sun” intaglio print by Stephanie Martin

CASFS embarks on yearlong effort to refresh programming

The Center for Agroecology & Sustainable Food Systems, a hub of innovation in sustainable agriculture and food systems research for decades, is embarking on a year-long effort to review and refresh its programs.

Widely recognized for pathbreaking scholarship and hands-on training, the center has evolved from a grass-roots gardening program to a full-fledged research and advocacy endeavor. CASFS has helped shape the national conversation about agroecology, food insecurity on college campuses, social justice in the food system, and more. Staff and faculty affiliates will spend the coming year assessing how the center can keep pushing the food movement forward, executive director Daniel Press said.

“The landscape has changed dramatically over the past 50 years, and even in the past decade,” said Press. “Our challenge is to think critically about our future and position ourselves to remain a leader for decades to come.”

To provide faculty and staff with the opportunity to thoughtfully craft a vision for the decades ahead, the center will also take a year off from its renowned Apprenticeship in Ecological Horticulture, an intensive six-month residential program that enrolls 39 people each year.

The curriculum of the apprenticeship, which began in 1973, has evolved over the years to incorporate community-supported agriculture and issues of social justice and worker welfare, but Press said it’s time for a deeper review of what the program offers and how it’s delivered.

“This pause will give us the opportunity to evaluate how we want to grow and change to meet the needs of the 21st century food system,” he said.

The center plans to continue all its other programs in the year ahead, including cutting-edge research, undergraduate courses and internships, offering community workshops, growing food for dining halls and campus food pantries, hosting the annual Harvest Festival, and much more.

Press, a professor of environmental studies who was appointed CASFS executive director in 2012, will step down as director this fall, though he will continue as associate dean for the Division of Social Sciences. Stacy Philpott, a professor of environmental studies and the Alfred & Ruth Heller Chair in Agroecology, will take over in October.

Expanding role

The UC Santa Cruz Farm and Garden is an important part of the campus’s efforts to address food insecurity among students, and Philpott said she wants to develop

new ways to increase its support for undergraduate and graduate students.

“We want to make sure our students have access to fresh, local, and healthy food, as well as the opportunity to learn more about our food systems,” Philpott said. “Our students care deeply about social justice and the environment, both of which intersect with how our food is produced.”

A 2016 UC study that found 19 percent of students reported they sometimes had gone hungry during the year. Another 23 percent said they had limited access to a variety of good-quality food because of a lack of money.

Last year, the center installed four “hoop houses” that allow the UC Santa Cruz Farm and Garden to provide a year-round supply of healthy produce to dining halls, food pantries, and pop-up markets on campus.

The Farm and Garden also provide fresh produce to the Cowell Coffee Shop for the Peoples, an innovative nontransactional food store and cafe that opened last year. The cafe is helping to address food access issues among students by providing food free of charge.

A new major in agroecology being developed by the Environmental Studies Department will further expand student involvement in the center. While still under review, the major may launch as early as fall 2020, according to Philpott.

“CASFS has been a national leader in the progress we’ve made toward building a healthy and just food system,” Philpott said. “There’s more to do, and CASFS will continue leading us forward.”

—Scott Hernandez-Jason



Fall 2019 Calendar of Events

Fall Harvest Festival

Sunday, September 29, 11:00 am — 5:00 pm

UCSC Farm

Join us for our annual celebration of the fall harvest featuring live music, kids' activities, workshops, tours, great food, and an apple pie contest! This year, in celebration of 40 years of Life Lab, the Festival will take place at the Life Lab Garden Classroom on the UCSC Farm. Admission is free for UCSC students, kids 12 and under, and members of the Friends of the UCSC Farm & Garden. Be sure to bring a reusable water bottle!

Free Guided Tour of the UCSC Farm

Sundays, October 6 & November 3, 2 pm — 3:30 pm

Cowell Ranch Hay Barn / UCSC Farm

Join us for the final monthly guided tours of the 2019 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 Hay Barn. Heavy rain cancels.

Last Day of 2019 Market Cart

Friday, October 25, 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 2019 season. Stock up on organically grown winter squash and maybe a pumpkin or two for carving or eating (or both!) along with some delicious fall produce and a fall bouquet.

Stories in Seed Breeding

Sunday, October 27, 9:30 am — 12:00 pm

Cowell Ranch Hay Barn

Longtime fiber artist and farmer Sally Fox will describe the process of breeding cotton to select for natural variations in color. She will also tell the story of resurrecting ancient Sonoran Wheat in response to commercial overbreeding. Attendees will sample bread made with this special wheat. Learn how to grow winter wheat in your own backyard. After planting a small plot on the farm, attendees will go home with some Sonoran Wheat seed to plant or eat, along with a few recipes. Samples of Sally's unique cotton fabrics will also be available to see and purchase.

Annual Meeting of the Friends of the UCSC Farm & Garden

Wednesday, November 12, 6:00 pm — 8:30 pm

Soif Restaurant and Wine Bar

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. Hear about 2019 Farm & Garden highlights and plans for the upcoming year and vote for new Board officers. RSVP is required. RSVP to casfs@ucsc.edu by November 1 (please enter "Friends RSVP" in the subject line and include your email address and phone number), or call 831-459-3240.

Bookshop Santa Cruz presents: Sean Brock, *South*

Monday, November 11, 7:00 pm

Cowell Ranch Hay Barn

Bookshop Santa Cruz and CASFS are thrilled to welcome award-winning chef, restaurateur, and author Sean Brock for an event celebrating his new cookbook, *South: Essential Recipes and New Explorations*. Brock will be in conversation with Tanya Holland, executive chef and owner of Brown Sugar Kitchen in Oakland and San Francisco's Ferry Building, and author of Brown Sugar Kitchen. Their discussion will be followed by a Q & A and book signing. Purchase tickets at bookshopsantacruz.com/seanbrock.

Dried Flower Wreath Making

Saturday, November 23, 9:30 am — 12:30 pm

Cowell Ranch Hay Barn

Learn how to create beautiful and long-lasting dried flower holiday wreaths with Beth Benjamin, former apprentice and founding student of the UCSC Garden, in this hands-on, "make and take" workshop. Beth will demonstrate the mechanics of putting everything together and will have several examples to guide your inspiration. You'll be able to choose from a wide selection of dried materials that were grown and dried at the Farm & Garden for your wreath. With care, your wreath will last for years. Light refreshments will be served and the atmosphere promises to be jovial, creative and social. Bring flower snips, pruning shears or scissors if you have them (there will be a limited number provided).

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, September 29 at the UCSC Farm

Celebrate the abundance of the fall harvest at the beautiful UC Santa Cruz Farm on September 29 from 11am to 5pm. Fun for all ages, the annual Fall Harvest Festival will feature live music, workshops, tours, kids crafts and activities, hay rides, an apple pie contest, and much more! This year's festival will also be a 40th birthday celebration for Life Lab.

Live music at this year's festival will include the Banana Slug String Band, Diana Gameros, and Sensory TRiBE. Attendees can also enjoy a workshop on bouquet-making, an herb walk, a bee talk, and more fun activities. Plus, join the "More than a Farm" Tour to learn about the research, social justice work, and community outreach happening at the Center for Agroecology & Sustainable Food Systems (CASFS).

Visitors of all ages are invited to sample apples, try out the apple press to make fresh cider, enter the apple pie baking contest, and enjoy delicious food from local vendors. Organically-grown produce and flowers will also be available for sale—and be sure to pick out a pumpkin from the pumpkin patch!

Festival-goers are invited to enter the apple pie contest by 12:30pm the day of the event. There will be fun prizes for contest winners and the first ten entrants.

Admission is free for UCSC students, kids 12 and under, and members of the Friends of the UCSC Farm & Garden; general admission is \$5 (cash only). Limited free parking will be available at the Hay Barn, Campus Facilities, and Barn Theater parking lots. Attendees are encouraged to walk, bike, bus, or ride-share to the event. Bring a reusable water bottle to help us make this a waste-free event.

The Harvest Festival is cosponsored by CASFS, the UCSC Food Systems Working Group (FSWG), Life Lab, UCSC's Measure 43, and the Friends of the UCSC Farm & Garden. Find the complete schedule of events at bit.ly/ucsharvestfest.



CASFS welcomes new executive director

This fall, Daniel Press will step down as CASFS executive director. Stacy Philpott, professor of environmental studies and the Alfred & Ruth Heller Chair in Agroecology, will take over the role in October.

Daniel Press became the executive director of the Center in July 2012. A member of UCSC's Environmental Studies Department since 1992, he served as department chair for seven years and held the Olga T. Griswold Endowed Chair in Environmental Studies. He is currently associate dean of Social Sciences, a title he'll continue to hold after he steps down as director.

As executive director of the Center, Dr. Press led a major expansion of the UCSC Farm onto new production fields and an effort to renovate the historic Cowell Ranch Hay Barn, now the new headquarters for CASFS. He helped develop new opportunities for undergraduate students to get involved at the Farm & Garden through a growing slate of classes and internships.

Dr. Press's long term goal as director has been to help make CASFS financially self-sufficient so that it may support agroecological research and training into its next half century and beyond. Under his leadership, the Center has adapted to the current needs of the food system while maintaining its impressive track record as a multifaceted research, education, and public service organization. We thank Dr. Press for his dedication to helping CASFS succeed!



Stacy Philpott is an agroecologist interested in community ecology, ecosystem services, urban agroecology, and interactions between agriculture, conservation, and farmer livelihoods, and she has worked for more than 15 years to understand these interactions. She has long been involved with the Center, serving as interim executive director for the 2015-2016 academic year, and currently serves as CASFS faculty affiliate. She worked to help develop a new major in agroecology at UCSC that may launch as early as fall 2020.

We're excited to embark on this new chapter of CASFS with Dr. Philpott leading the way!

Master gardener Orin Martin authors new book, *Fruit Trees for Every Garden*

The beautifully illustrated and lovingly written new book *Fruit Trees for Every Garden* is not your standard how-to book.

This volume is the fruit of a life's work, a gift to aspiring and experienced orchardists alike. Master gardener Orin Martin captivates readers with the skill of a storyteller, deftly carrying them along every step of the way, from fruit-tree selection and soil preparation to planting, pruning, care, and harvest. Writing with lyricism and melody, Martin has accomplished the impossible: He has written a can't-put-down grower's manual, a text that's destined to become a classic.

Martin developed his knowledge and talent as an educator over more than four decades at UC Santa Cruz, where he manages the Alan Chadwick Garden.

"Fruit trees are just addictive," says Martin. "Learning to grow fruit trees is fascinating, humbling, and rewarding."

In *Fruit Trees for Every Garden*, Martin gives readers everything they need to become successful fruit farmers, including "bite-sized, digestible morsels" of the science behind the steps he carefully lays out. "This is a book for curious gardeners—those who want step-by-step instructions and a little bit more," he says.

Graphics and line drawings illustrate key principles and concepts, including how to build a compost pile and pruning, a subject to which Martin devotes 50 pages of his 265-page book. "That's appropriate, because you will spend more time pruning and training than all the other activities combined," he notes.

Pruning warrants careful demystification in part because it is "scary and counterintuitive. The harder you cut back a branch, the stronger it grows." Pruning can overwhelm and paralyze home gardeners, who tend to be either "whackers or haircutters." Moderation is the key, he notes, adding that pruning can also reclaim an old, unproductive tree.

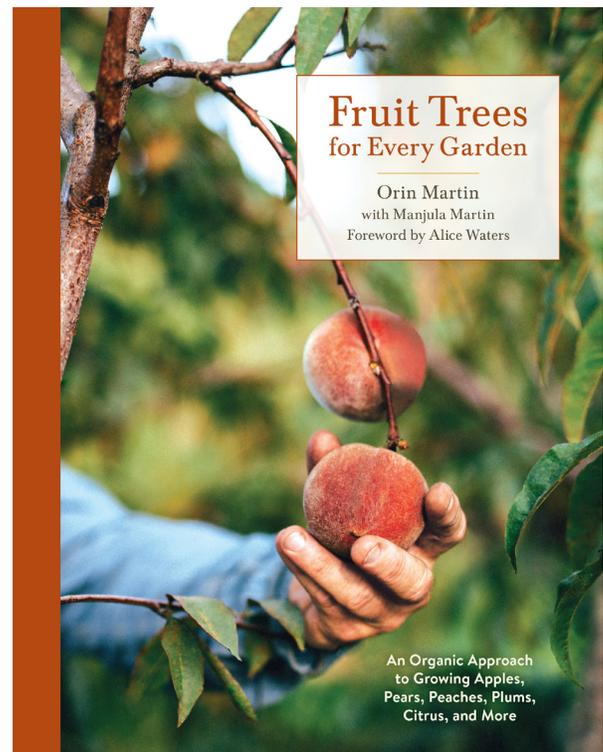
A thorough, engaging guide to success

Martin coauthored *Fruit Trees for Every Garden* with his daughter Manjula Martin, an author and the managing editor of the literary journal *Zoetrope: All-Story*. His wife, Stephanie Martin, created etchings that grace the beginning of each chapter, as well as the illustrations; restaurateur Alice Waters wrote the forward, and Liz Birnbaum provided dozens of photographs.

Through his work at UC Santa Cruz, Martin has taught nearly 5,000 apprentices, undergraduates, and home gardeners, all of whom have been fortunate to hear from the master himself about the art and science of growing fruit trees organically. Martin became smitten with

apples more than 30 years ago. The 3-acre Chadwick Garden is now home to more than 120 varieties of apples, as well as an extensive collection of pears, citrus, and stone fruits, including apricots, peaches, nectarines, plums, pluots, and apriums.

Martin describes gardening as "a process of observation, decision, action, and reaction. Rinse, repeat." Successful organic gardening is based on understanding the ecological systems at work in and around one's trees, and observation is the key to success, he notes. A hand-lettered sign posted prominently in the Chadwick garden proclaims, "The best fertilizer is the footsteps of the farmer or the shadow of the gardener. Walk the garden daily. Look around."



A handbook for all regions

Although he has spent his career on the West Coast, Martin has Massachusetts roots, and he has written a book of value to orchardists and gardeners across the country. USDA hardiness zones guide readers to fruits and varieties that will do well where they live. He also provides an extensive list of resources, including nurseries, soil-testing labs, and educational resources.

Perhaps the most challenging lesson Martin offers is that planting a fruit tree is not, ideally, an impulsive thing;

continued on page 8

Farm hosts organic ag research tour for Congressman Jimmy Panetta

It was a beautiful September morning when Congressman Jimmy Panetta visited the UCSC Farm to hear from leading researchers in the field of organic agriculture.

Panetta (D-Carmel Valley) got updates from faculty member Carol Shennan, a professor of environmental studies, and UC Cooperative Extension Specialist Joji Muramoto, who have led the campus's pioneering work on organic strawberry production. He also learned about "no-till" farming, a strategy designed to increase carbon sequestered in the soil, from Farm Manager Darryl Wong, who is also a graduate student in environmental studies.

Panetta, who was delighted to receive a bag of strawberries from grower Rod Koda of Shinta Kawahara Farm, listened carefully and fielded questions from a number of attendees. The "field day" was a joint production of UCSC's Center for Agroecology and Sustainable Food Systems (CASFS) and the Santa Cruz-based Organic Farming Research Foundation (OFRF). The two organizations share a vision of producing food in harmony with natural systems.

CASFS Executive Director Daniel Press underscored the research contributions of public universities, and UCSC in particular, throughout Panetta's visit. Brise Tencer, executive director of OFRF, made the link between university research and public policy. Stacy Philpott, professor of environmental studies, highlighted educational programs and student experiences that can be transformational for undergraduates.

"Thanks to Jimmy Panetta, and Sam Farr before him, UC Santa Cruz has been the beneficiary of federal investment in organic agricultural research for many years—an investment that has paid handsome returns for farmers and consumers," said Press. "We were delighted to show Congressman Panetta where those dollars have gone and to highlight our leadership in sustainable agriculture."

Press also described the pathbreaking work in sustainable aquaculture being done by Anne Kapuscinski, a professor of environmental studies and the director of UCSC's new Coastal Science and Policy Program. Kapuscinski has developed an ocean-friendly feed for farmed fish based on microalgae rather than wild fish. Her lab, which is under construction, will be based on the UCSC Farm.

Social Sciences Dean Katharyne Mitchell attended the tour and said afterwards that bringing elected officials to campus is an impactful way to communicate the importance of investing in the university. "It really brings the message home when they can see firsthand what we're able to do with their support," she said. "Their work helps make all of this possible."

The visit was organized by OFRF with help from their policy intern Chantal Waite, a UCSC undergraduate who also works in Shennan's lab.

During a free-ranging, post-tour discussion, CASFS research associate Mark Lipson (Merrill, '81, environmental studies) and Tencer expressed concern about structural changes taking place at the U.S. Department of Agriculture, including moving offices from Washington, D.C. to Kansas City.

"We have to do what we didn't do in November 2016, which is get out the vote and vote," Panetta said with a smile.

— Jennifer McNulty



Jimmy Panetta, second from left, with (left to right) Carol Shennan, Joji Muramoto, Daniel Press, Darryl Wong, and Brise Tencer, executive director of OFRF.

Friends of the Farm & Garden Board Officers nominations

It's time to vote for a new slate of officers for the Farm & Garden Board of Directors! The nominees are: Delise Weir, president; Sarah Thorne, vice president; Dan Dion, treasurer; Sandra Morishige, secretary. Cast your vote on November 12 at our Annual Meeting at Soif Restaurant and Wine Bar.

Apprenticeship Updates

Here's a brief look at what some of the graduates of the Apprenticeship training program at the UCSC Farm & Garden have been doing recently. Apprenticeship alumni, we welcome your updates! Please send them to casfs@ucsc.edu.

Marsha Habib (2008) is the founder of Oya Organics, a 15-acre operation in Hollister, California. She was featured in Salt and Straw ice cream's blog as one of 15 West Coast farmers they worked with to source 14,000 pounds of produce for their August Farmers Market flavors.

Doron Comerchero's (2004) organization, Food-What?!, was named non-profit of the year by Senator Bill Monning. Apprentice grad David Robles and Doron were honored with the award by Senator Monning in Sacramento this summer.

Karen Washington (2008) and her co-farmers at Rise & Root Farm in New York will be the subject of a documentary that is currently in the works. You can help support the documentary's production by donating to their Indiegogo campaign: indiegogo.com/projects/rise-root-revolution-documentary-film

Leigh Gaymon-Jones (2016) has accepted a position as Coordinator of Residential and Community Life at CASFS. She had previously served as part-time interim Coordinator, but is thrilled to be an official member of the team.

It's hard to believe there are only five weeks left in our apprenticeship! The past five months have flown by; it feels like just yesterday that we were clearing cover crops and sowing our first rounds of seeds.

I feel a sense of urgency among the apprentices right now as we all figure out where we'll be going and what we'll be doing after October 11th. Because of this, I often find it hard to remain present and soak up all that I can while I'm still in this incredibly rich environment.

As I think about my goals for the next few weeks, the question, "Where are my hands?" comes to mind over and over. When I find myself thinking, planning, scheming, worrying, or arguing with the voices inside my head, I direct my attention to my hands, focusing on the physical sensations in my body. This brings my focus back to the present so I more fully engage with whatever is going on in the moment.

On Monday, my hands were consumed with harvesting the goodies for this week's CSA share! I'm excited to share the tastiest arugula I've ever had with our members.

One of my favorite pastimes at CASFS is trying a new-to-me variety of apple every few days. I tried Ginger Golds for the first time today and was blown away by their texture and flavor. As a baker, I love to find new ways to showcase apples; one of my all time favorite recipes is Julia Turshen's applesauce cake. If you don't have applesauce on hand, just chop up a few of your favorite apples (skins included), throw them in a pot with a half inch of water, and simmer until they're nice and tender. Blend it up to your desired consistency - for this recipe, I like to leave a fair amount of chunks. Enjoy!

—Jaime Hatch, 1st Year Apprentice



2019 apprentices pose for their class photo

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Fruit Trees for Every Garden (from page 5)

it takes 12-36 months to identify and prepare a site.

"If your soil is in poor condition, you might be wise to engage in a rigorous soil-building program for as long as one to three years," he advises. Compost and cover crops are Martin's "tools for improvement," and he shares his expertise with zeal, ending the section on compost with a friendly request: "Please, I implore you: You must make compost!" Additionally, aspiring orchardists want to create a biodiverse ecosystem, with flowers that attract pollinators and beneficial insects, and birds that help control pests. "It's not just the tree, it's the environment the tree is growing in," says Martin. "What you hope to create is a little slice of paradise in your backyard."

For those with patience, and those who lack it, Martin's book will greatly enhance their chances of success. He certainly understands the irresistible urge to plant fruit trees, which he links to humans' "long and storied" relationship with fruit trees. Archaeobotanists have uncovered evidence that orchards may predate ancient grain production by 1,000 years or more, and studies show trees in the landscape have a calming effect on people, he proclaims proudly. Moreover, trees are the "lungs of the planet," removing carbon dioxide, sequestering carbon, and "exhaling" oxygen. And at the end of each season, the gardener's commitment and dedication is rewarded with the best prize: fruit.

"Your relationship with a tree is like a conversation—a really long conversation," says Martin, who wants more than anything to empower more gardeners to begin those conversations.

—Jennifer McNulty

Keep Up with Farm & Garden News!

Keep up with the latest news from CASFS/UCSC Farm & Garden by following us on social media. Like us on Facebook, and follow us on Instagram and Twitter! Plus, check out the CASFS website for updates, information, and resources: casfs.ucsc.edu. You'll find additional resources and a number of "how to" videos on the CASFS YouTube channel, www.youtube.com/user/casfsvideo/videos. If you're not on our email list, drop a note to casfs@ucsc.edu and let us know you'd like to be added to receive regular updates on Farm & Garden and CASFS activities.

