# Soil Workshop Series

Date: Oct. 30, 2023

Present: Cole, Derek, Brooke, Ben

Agenda:

- Confirm AV for Joshua
- Outreach
- Guest Educators
- Agenda: <u>Day of flow overview</u>
   Materials: <u>Items to bring</u>
- Farmer Campus

Date:Tuesday Sept 26, 2023

Present: Cole, Brooke, Derek, Joshua, Traver, Nazshonnii

#### **Activities:**

- Cover Crop Broadcast
- Compost/Vermicompost
- Perennial Anchors
- Low/No Tille?
- Mulch?

#### Overview:

- o Our model is skillshare framework, farmer-to-farmer education
- Mobilizing a lot of labor for the hosting farm; there is a desire for reciprocity when we join these farmers on their land

### Agenda:

- Guest Educators: 3 stipends of \$500 available
  - Traver Riggins (Gill Tract)
  - Cole (UC Berkeley Soil)
  - Brooke (Agroecology)
  - Nazshonnii (Gill Tract)
  - Derek (CCRCD)
  - Joshua Garcia: UC Davis Lab
    - Foundational
    - Urban Agriculture Soil Research (looking at variety of soil amendments, greenwaste, hydroseeds, Zoo compost)
    - What are the affects on the Soil?
    - Discussion on Holistic framework on soil health
    - Human Aspects (connection with producers/compost suppliers)
    - Access to the outline and plan/agenda for the other workshops in the series
- Farmer Campus Update

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- Agenda: Day of Flow
  - 10:00-10:20 (folks arriving, snacks)
  - 10:20-11:00 (site intro/mistica)
    - Revisit of Workshop 1- Whole Relationships with Land-Community
    - How/Why soil is foundational [abundance/diversity of life]
    - "Sin agua no hay vida, sin tierra no hay paz"
  - 11:00-12:00 (soil health intro potentially Joshua Garcia)
    - Broad on-farm research with farmers for soil building practices
    - What is Josh seeing on the ground?
    - **Story Telling:** General Share about what he's doing (interactive)?
      - Root-Rhizosphere biology
      - Sustainable soil management for urban farmers
      - Climate smart and regenerative management practices
    - What are some ways to increase audience participation?
      - Reflective activity; what are you currently doing? What would you like to be doing? How does this information fit into your current framework?

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- 12:00-12:45- lunch (Sourcing the produce from farmers in the network)
  - Extra awnings, seating?
  - Shade structure?
- 12:45-2:30 Activity Rotations 30 Minutes each
  - ([**Activity 1**] compost building/vermicompost- Ray, Jeremey, Brooke with worm give/away
  - [Activity 2] Cover cropping- Traver
    - Cole-connect [Traver, Other farmers, CAFF workshop folks?]
    - Q: Ray/Jeremy Cover Cropping- can we help broadcast/rake in?
    - Grounded conversation around process of sowing/managing cover crop
      - Game-Fun Activity [Traver and Cole collaboration]
  - [Activity 3]- Perennial planting and hedgerows- Derek
    - Planting, mulching
    - IMP/Pollination
      - Materials: Signage
      - Plants (Herbs, trees, Low-growers)
  - [Activity 4] No-till, low-till- Cole
- 2:15-3:00- Resources for farmers, funding pools, Questions/concerns, closing and reflections (DE)
  - Question: what are the edges, barriers?
  - What's helped folks overcome and move forward?
    - Interactive: Participants add with sticky notes
  - Mapping/Listing the resources/Programs
    - Fed, State, Local, Community, Educational Partners, Other
    - Certifications

- Volunteers
- Q: Presence of these partners ie NRCS?
- Continuing Education/Training:
- Videos, Podcasts, Soil Testing Labs
- Farmer Campus: Resources
- Sign up Platform

Date:Tuesday Sept 19, 2023 Present: Cole, Brooke, Derek

Agenda:

- Soil Workshop 2
- Guest Educators
- Budget

o Meal: \$250

o Materials: \$250

- \$500 host site
- \$500 x3 speakers= \$1,500
- \$100 dollar stipends (for 22 participants)
- Resources
- Farmer Campus
  - Educational Resources
    - Soil health
      - Physical properties
      - Chemical properties
      - Biological properties
    - Practices
      - Cover Crops
      - Fertigation
      - Compost
  - Soil Testing Sites and Labs (Cole)
  - Seed Sourcing Resources
  - Compost Sourcing Resources
  - Grants Available for Farmers to Enhance Soil Stewardship Practices
  - Extension Resources and Contacts
    - NRCS, Cooperative Extension, RCD
    - Map out Agency/organization resources to pay/support the soil conservation practices
- Food
- Cover Crop Seed / Worm Giveaway
- Workshop Name
- Day of Timeline:

- 10:00-10:20 (folks arriving, snacks)
- 10:20-11:00 (site intro/mistica)
- 11:00-12:00 (soil health intro potentially Joshua Garcia)
- o 12:00-12:45- lunch
- 12:45-2:30 Activity Rotations 30 Minutes each
  - ([Activity 1] compost building/vermicompost- Ray, Jeremey, Brooke with worm give/away
  - [Activity 2] Ferments
  - [Activity 3]- Perennial planting and hedgerows- Derek
    - Planting, mulching
  - [Activity 4] Cole input on activity
- 2:15-3:00- Resources for farmers, funding pools, Questions/concerns, closing and reflections
  - Consensus on Final Lineup of speakers/activity facilitators [Cole/Brooke/Derek]
    - Process of the stipend:
      - On the registration for farmer wellness (button for the stipend?
      - If so please click yes/no and address
      - [Note, don't put the written portion for why folks need the stipend]?
        - Target Group:
          - Farmer-Farmer Skillshare network 117 people
          - Outreach: Start with CC Farmers, then open it up
             1-2 weeks later

Date: Monday Sept. 11, 2023 Present: Cole, Brooke, Derek

Agenda:

- Reflections on UCSC Gathering
  - Rose:
    - CR: Community Building- Turnout, connections, interpersonal mix (levels of engagement)
    - DE: Community building, brought forth motivation and inspiration, good balance of presenting content and showcasing different work, maybe provided some examples maybe was not all-encompassing. Physical movement from classroom to outdoor space, helped people stay engaged. Especially in the beginning, grounding in the body. That's something that I wish happened in more workshops and discussions. People come in feeling insecure and nervous, that's a good way to be ready to show up.
    - BP: Growinding Support, forms of praxis within the panel, space to make typically non politicized topic politicized, the group turnout, space/farm as inspiring location to work with
  - o Thorn:

- CR: Balance- How to ground into specifics without lost in minuteness(not lost in generalities)
  - Patriarchal space [Overwhelming male presence at this venue/space]
- DE: With field rotations, being in physical space, touching and observing was cool. But connecting the big picture processes to the microscale of what individuals work with. What do soil building processes look like across scales? One more piece to bridge the panel and the field section would have been more helpful. Creating relevance of how this translates to the sites that others are working on. Focusing on principles. Making it relevant to others' practice. And so what? And why? Tying things together for folks.
- BP: Hard time engaging with hands on piece, didn't feel super engaging (perhaps layers of patriarchy), something to be learned with the jars.
   CAFF doesn't source food from local farmers

#### Build On:

- CR: Blending the dimensions of the movement together (grounded movement, specificity, how to integrate conversations across different ways of thinking)
  - Timekeeping/management
- DE: Ways to stay plugged in. Maintaining modes of connection. Ways of reflecting or keeping thought going after event.
- BP: This is a great first piece, what the part 2 could look like. Panel and/or dialogue. Field Day rotating through activities
  - Ferment making
  - Vermicomposting
  - Workshop on cover crops (Sowing/ donations of seed)
  - Soil Science piece, how to read soil tests, structure
  - Actual building of compost on the farm, placement/design of where [Check with Ray/Jeremy]

## Payment for Cole

Cole sending invoice to Brooke and Jeneba

## • Changing CFP Grant Deliverables

Still waiting to hear back from Crista

#### Soil Testing

- Farms
  - Raised Roots- Still waiting to hear back from Kevin, Jamil, and Alexa
  - Maria Catalan- Cole had an initial conversation
  - Three Feathers-Cole had an initial conversation.
  - Healthy Hearts- Has yet to reach out to Ray directly
- Timeline
  - Aiming for November sampling...This will influence spring plantings.
- Equity Workshop 2: Nov. 9th Gathering
  - Background

- NRCS Equity Grant
- From Roots to Canopy: Roots, Trunk, Canopy (Fruits?)

## Guest Educators

- Kristyn Leach?
- Guillermo Vasquez?
- AC Collective (non-stipended)
- Cole Rainey (non-stipended)

#### Outreach

- Target Audience: Folks with experience, pre-reqs?
- Smaller Group, Creating a community of practice (non-hierarchical space; collective sharing and exchange of knowledge)
  - Budget reflection on quantity of apprentees

## Activities (based in stations, small hands-on experiences)

- Ferment making
- Vermicomposting (brooke)
- Workshop on cover crops (sowing / donations of seed)
- Soil science piece, how to read soil tests, structure (cole)
- Compost building (check with Ray/Jeremy)
- Perennialization? (hedgerows, multi-functionality, etc.) (Derek)
  - Q: How to have activities be a way in which the producers can share/be a part of the teaching/sharing
  - Q:

### Resources

## Farmer Campus

- Educational Resources
  - Soil health
    - Physical properties
    - Chemical properties
    - Biological properties
  - Practices
    - Cover Crops
    - Fertigation
    - o Compost
- Soil Testing Sites and Labs (DE)
- Seed Sourcing Resources (DE)
- Compost Sourcing Resources
- Grants Available for Farmers to Enhance Soil Stewardship Practices
- Extension Resources and Contacts
  - NRCS, Cooperative Extension, RCD
- Food
- Cover Crop Seed / Worm Giveaway
- Workshop Name

Date: Monday, Aug 14, 2023

Present: Cole, Brooke

Agenda:

August 15th Workshop

Tuesday, August 15 9:30 AM-3 PM

UCSC Cowell Hay Barn and Farm

Cole will be there around 9ish, Brooke will arrive at 9:30ish

### Parking

- Where: UC Santa Cruz Hay Barn, 94 Ranch View Rd. Santa Cruz, CA 95064
- o When: Tuesday, August 15th | 10 AM 3 PM
- Parking: Please park in parking lot #115 (just across Coolidge Dr. from the Hay Barn). Parking is \$10 and a parking attendant will be present to sell parking permits at the entrance of the lot. For anyone who needs ADA parking accommodations, there is ADA parking at the Hay Barn lot (appropriate placard needed). You can find driving directions and parking payment information here.
- Brooke and Alexa can park at haybarn lot (we should not need to pay)

#### Presentation Details

- Slidshow
  - We each have about 12-13 min to share.
  - 5 farms will be presenting than dialogue as a group.
  - Cole will be facilitating that part.
  - Farmers Speaking in the Morning: Hope Barajas from Deep Medicine Circle, AB from Peoples Programs, Erin and Becca from Kern Family Farm, Traver from Gill Tract and Urban Tilth, AC Brooke and Alexa

#### Day of Flow

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PROGRAM										
Program Item	Start time	End time	Point Person	Location	Notes	Event capacity				
Check-in with morning coffee + pastries	10:00 AM	10:30 AM	Rose		Provided by: Companion Bakeshop					
Event welcome	10:30 AM	10:45 AM	Sara leading							
Farmer circle and skill		12:00		UCSC Cowell Hay Barn	Farmer panelists: Becca and Aaron Kern, Hope Barajas, ab banks, Chito (?) Moderator:	70 + 15 students				
share Lunch	12:00 PM		leading Rose		Sara/Cole Provided by: Cafe Iveta					

Travel from Hay Barn to Farm	1:00 PM	1:30 PM		NA		
Field walk and			Joji/Darry		Presenters: Joji, Darryl and UCSC farm management	
demonstration	1:30 PM	3:00 PM	I/Cole	UCSC Farm	team	

# Supplies to Bring

- Create Mailing List for AC
- Mistica supplies?
- AC Flyers
- o Camera?
- Seeds for Bees Flyers

### Attendees

o Potentially 75-100 people will be there

#### • Reminder email?

- CAFF sent out a reminder email to all participants
- Included parking info

### • Farmer Campus

- Educational Resources
  - Soil health
    - Physical properties
    - Chemical properties
    - Biological properties

#### Practices

- Cover Crops
- Fertigation
- Compost
- Soil Testing Sites and Labs
- Seed Sourcing Resources
- Compost Sourcing Resources
- Grants Available for Farmers to Enhance Soil Stewardship Practices
- Extension Resources and Contacts
  - NRCS, Cooperative Extension, RCD
- Theory

## • Check in about Ray

Cole will follow up about testing after event at UCSC

#### Omar

 Cole is in contact with Omar and is coordinating a date to go down to Maria's to do soil testing.

Date: Monday, July 10, 2023 Present: Leah, Cole, Brooke

### Agenda:

August 15th Workshop
 Tuesday, August 15
 9:30 AM-3 PM
 UCSC Cowell Hay Barn and Farm

### Soil as teacher, soil as healer: preparing the ground for agroecology

Across California bloom visions of liberated and ecological futures. Through occupations, easements, land trusts and leases, farmers are accessing and opening the ground for food sovereignty and agroecology to take root. With limited access to land and capital, many of their projects also implement soil-first practices that require significant labor, knowledge, and time: no-till, perennialization, fermentation, seed saving, on-site composting, and more. As we strive to steward the soil, what can we learn from the underground to help move us forward? How can soil teach us how to decompose current systems in service to more life-giving ones? And how is our land stewardship transforming soil biology, increasing resilience, and bringing about "healing"? As the topic of soil health becomes more mainstream, and we hear calls to "heal the land," we yearn to feel what this means in practice! Join us at the UC Santa Cruz Center for Agroecology to convene with a circle of farmers, land stewards, organizers, students, and teachers to explore these themes together!

- AC intro and soil practices
- Hope Bajaras Deep Medicine Circle, AB Peoples Programs, CAFF, Cultural Conservancy
- 2nd half of day is more of the workshop, how to turn a bed not till, bio fertigation for soil amending,
- AC support with promotion: is there a sign-up listen
- Report back on
- Cole making IG post and flyer plus google form sign up
- Cole will send invoice and we will process payment via Gusto
- Cole will make google slides for farmers and organizers to add photos and info

#### Farmer Campus

Coleman Rainey Draft deadline August 2

### Healthy Hearts

- o July 18 visit, 9:30 AM
- Carpool to Pittsburg!
- Funding for others to speak; who will they be?
  - Focus on a farmer or someone whose role is land stewardship

### Changing the CFP Grant (community food project)

- We wrote the grants and didn't think we would get both.
- Could potentially write in for planning to go along with the workshop series
- Could potentially move soil testing to implementation
- Soil Stewardship Implementation Funds
- We could do a very cheap soil test to measure things like soil carbon
- Soil containment has a huge value
- Ideas for changing:
  - Support farmers with small implementation grants for soil health practices
    - Biofertigation, compost, cover cropping, tools for no-till
  - Building online resources for farmers via Farmer Campus

We could measure things like organic matter over 3 years

#### Soil Testing

- How to make additional soil testing components that allow farmers to implement practices
- Berkeley Basket did not receive testing last year
- Potentially Cultural Roots too
- We have \$450 for soil testing for 4 farms per year= \$1,800
  - Keeping it in the network; growing the network intentionally
    - Letting farmers decide what is most important to them

### Budget

- \$1,600 for the workshop x 2 year
- We have \$450 for soil testing for 4 farms per year= \$1,800
  - \$450 is *total*; for labor, lab analyses, etc.
- o CFP budget is similar; except per diem
  - Brooke: let's wait soil testing process until we hear back from CFP?

Date: Thursday, June 29, 2023

Present: Agenda:

# Strategy/Vision

- From Marianna + CCRCD: Trunk: The meat of agroecological-centered land stewardship practices; what does this look like in action on the ground? Can cover: [Holistic Land Stewardship Practices: soil health, ] compost, mulching, seasonality, [Biodiversity-habitat]more.
  - Technical Assistance: Map out a range of Resources, who are some supportive agencies/organizations
  - Still waiting to hear back on UDPI? Grant, with resources for soil health testing, resources
- **Urban Soil Assessments-** In order to create viable urban farming initiatives, it is imperative that soil health be evaluated to ensure community health and thriving farms. Urban agriculture often faces high rates of soil degradation due to contaminants, unauthorized industry dumping, construction, and heavy traffic. Through biannual on-farm workshops that provide farmers with the tools to both evaluate, steward, and remediate their soil we create viable urban agriculture initiatives in the Bay Area. Urban Soil Stewardship workshops taught through this grant will address the following topics: Soil fertility, compost, microbes, benefits of cover cropping and different cover cropping techniques, no-till farming principles, linking soil health to human health, mycoremediation, soil testing, and contamination. Four local urban farms will be provided with soil testing a year, to ensure soil health from urban contaminants, test organic soil matter content, and soil texture. These comprehensive soil tests will be carried out by local soil ecologist Cole Rainey, who will process lab results at UC Berekely's Agroecology Lab. Urban soil stewardship workshops will be facilitated by members of AC team and Cole Rainey on a biannual, basis free of charge to local urban farmers. Each workshop will serve between 10-20 farmers.

## Outcomes and Benefits (2023-2025):

 80-120 beginning urban farmers will report having a deeper understanding of holistic soil stewardship practices.

- 12 (4 per year) urban farm sites will have extensive soil testing including soil composition and contaminants
- Second soil workshop could be part of sowing AC's cover crops and talking about the benefits of cover crop. Potentially could give out cover crop seed to urban farmers. Novemberish
- How do we humanize the soil testing; soil science can feel sterile the way it is presented to folks. As opposed to having the actual testing be the community work, having larger overarching workshops. We've done soil testing with these folks; unless it is coupled with other soil health-building tasks on site. Soil testing isn't super engaging.

## Budget

## **Contra Costa RCD Funding Contribution:**

- \$500/ host site
- 3 speakers @ \$500 speaker \$1500
- \$100 travel stipend for up to 22 participants \$2,200

Total workshop funds: \$4,200

## **Agroecology Commons Contribution:**

Meals: \$250

• Materials and Supplies: \$250

- UC Berkeley Agroecology Lab: Soil Testing and Soil Health Workshops: \$2,500 per workshop (\$1,600 per workshop)
- \$450 per soil test \$1,800 a year (4 test)
- Guest Educator Honorarium \$1.600

Total Workshop Funds: \$5,100

Overarching workshop budget?

# **UC Berkeley Agroecology Lab**

- Teach and host two soil health courses per year and conduct participatory soil testing (\$100/hour for 32 hours/year) = \$3,200/ year
- Test four urban farm sites' soil per year \$450 ea. = \$1,800/ year

Total: \$5,000/year

### Timeline

- Desire to have SOME testing results available at workshop?
- How much timing is needed beforehand?
  - Testing done at AC, UT, Sogorea Te'
- 1st event setting stage offering resources, interpreting results, decolonizing soil testing
- November:
  - Wed or thurs in november that works
  - Hold 8th and 9th
- Set up meeting w Ray in person

- 9am-2pm
- Earlier morning July 12th

#### Location

- Contra Costa
  - Healthy Hearts Institute preference! in Pittsburg
    - Need to check in about space, building access, shade structures
    - Pittsburg close to BART
    - El Pueblo Housing Projects
    - RCD could help coordinate pickups
  - Urban Tilth busy w/construction
  - Bayo Vista Housing Project
    - Community garden project; solid piece of land with access
    - Right next to refineries; concern about soil contamination
    - Testing needs to happen anyway;
  - Folks in East Contra Costa?
  - Family Harvest Farm
    - Run by john muir land trust on pg & e background
    - Have infrastructure in place
    - History of herbicide application... soil remediation!

- Alameda
  - Indigenous Permaculture
  - Gill Tract Community Farm
  - Castlemont High School
  - Berkeley Basket
  - Raised Roots

#### Educators

- Derek and Marianna-
  - Share about government resources for soil health
  - MZ and DE touch bases w/ Aysha Peterson
- Aidee Guzman?
- Kenzo Esquivel (UCB)
- Okra Kyser
- Pastor Mike (Center for Food, Faith, and Justice)
- Online Learning Component Farmer Campus
- Outreach
- Workshop Components:
  - Decolonizing soil science: how to evaluate soil with taste, texture, weeds in the field etc.
  - Soil testing resources
    - How to take, send, and interpret soil samples
  - Derek and Marianna- Map out a range of Resources, who are some supportive agencies/organizations
  - How to grow on lands that have been degraded

How to interpret soil testing results

## Soil Testing

- How do we materially uplift farmers so that we can uplift their practices and implement their practices. Can we validate a certain practice to see how their soil has changed through a practice. What is the relationship between testing and the workshops.
- o How can we humanize soil testing and make it feel less sterile.
- August:

## C/i w/ Ray

- \$500/ host site
- 3 speakers @ \$500 speaker \$1500
- \$100 travel stipend for up to 22 participants \$2,200

Total workshop funds: \$4,200

- Interested in the enterprising information
- YES to workshop
  - Nov. 8 or 9?
  - Afternoon or morning?