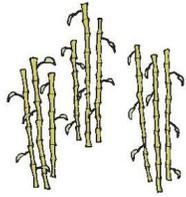


# APPROPRIATE TECHNOLOGY TRANSFER

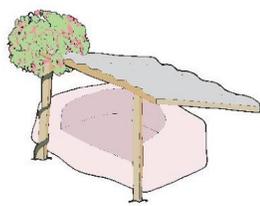
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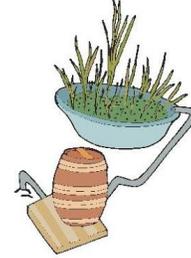
Bamboo Forest



Cob bench



Hot Composting



GreyWater Marsh

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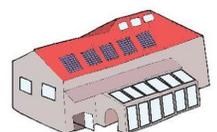
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# Appropriate Technology & the CCAT House

## What is Appropriate Technology?

Appropriate technology is not a specific item, it's a way of evaluating the social, economic, and environmental impacts of introducing a technology into our lives. As E.F. Schumacher said when he coined the phrase, "AT is technology with a human face."

"CCAT seeks to stimulate innovation through utilizing the creativity found in all of us while placing priority on the human experience. By searching for problems and defining the needs not being met, CCAT is able to brainstorm solutions that will be prototyped. By the end something has been created that can be tested, reflected, and readjusted for improvements" shared by a CCAT friend.



Sharing smiles during a Volunteer Friday lunch

## What is CCAT?

CCAT strives to demonstrate that living lightly on the earth is both practical and rewarding. We are dedicated to sustainability and to help others live likewise. We seek to accomplish this mission by:

1. **Demonstrating** appropriate technology in a residential setting.
2. **Dispelling** the myth that living lightly on the earth is difficult or burdensome.
3. **Collecting** and **disseminating** information about appropriate technology.
4. **Examining** the ethical and social consequences of technology



Horno, Shed, &  
Solar Rainwater Catchment



Wood Rack



Yurt



Sebastian leading a garden tour during our Fall Open House



# Co- Directors: Hellos & Goodbyes

## Internal Co- Director: Casey Albarran

When looking into HSU in my transfer process I had come across CCAT's website and fell in love. I made sure to see the Buck House and grounds during my preliminary visit to Humboldt and I could not wait to get involved. On my first Friday of my first semester I came to Volunteer Friday and ended up turning the compost for over an hour. I made sure to come back as many Friday's as possible that semester, and really hoped to eventually be an employee or Co-Director. The community and resources that CCAT offers inspired me the most.

The projects that I have been involved in over the last academic year was the biennial report, mushroom madness week, mycology club activities, budget activities, and AS coordination.

Mushroom Madness was a week-long event that was hosted at CCAT in collaboration with the Mycology Club. The club had formerly paid to hold their mushroom fair at the Kate Buchanan Room but we offered CCAT as a free space to hold their event and we even collaborated and compiled a whole week of mushroom events. It was originally supposed to just be the Mushroom Fair hosted at CCAT but ended up being a whole week of mushroom activities, including inviting a friend from the Radical Mycology Convergence that CCAT members attending the previous October.

Some advice for some first timers is: take a CCAT course (ENST 123), visit the Yurt, and pick some veggies!

**Describe a moment at CCAT where you thought "This is why I do what I do" (a rewarding experience, a completed task, seeing smiling faces etc.)**

During May Day and Harvest Festival, looking at the grounds from my bedroom window upstairs and seeing all the awesome guests enjoying CCAT's beautiful space.

My favorite events are a tie between May Day 2019 and Mushroom Madness Week, due to the awesome festivities and workshops we put together and food we worked hard to provide.



Casey tossin and a squashin'

**Are there any quotes, inspirational ideas, funny moments/stories, or anything you would like to share with the CCAT community and beyond?**

Ben to Karina: "What do you think?"

Karina: "I think it'll be great!"



Ben shaving wood on Pig Pen Roof with a draw blade

# Co-Directors: Hellos & Goodbyes

## Physical Co-Director: Ben Nguyen

My name is Ben Nguyen and I am the 2019-2020 Physical Site Co-Director. I am an Environmental Studies major with an emphasis in AT and a minor in Economics. Getting involved with CCAT has been the best decision within my time as a student at HSU. Being a part of this community of inspiring individuals has pushed me to develop my own personal and professional skills working towards social and environmental justice.

Not only has it given me the ability to bring classroom theory to life through hands on experience, it has given me the opportunity to help manage an organization that embodies social justice at its core. The Co-Directorship position has been the most challenging and rewarding experience of my life. Navigating an entirely student funded and operated program is endlessly dynamic in nature. It also comes with the responsibility of upholding a return on investment for those enrolled at HSU. The sacrifices made by generations passed to give current students the opportunity for education is something that constantly holds me accountable.

I hope to continue the work of those who have lead before me and introduce new approaches to ethical existence where appropriate. I aim to assist in solidifying CCAT's longevity by institutionalizing the maintenance and operations of these technologies and resources offered. In short, let's keep doing rad things with rad people

Ben wearing protective goggle while sharpening tools with pedal power bench grinder



Karina's oatmeal & honey mask during Harvest Festival



## External Co-Director: Karina Coronado

CCAT. Ah, CCAT. Inhabiting the most NW room in the Buck House has transformed my feelings towards the entangled intricacies of living, working, schooling, and socializing all in the same place; all aspects of life in conversation with themselves. One of my favorite activities is flipping through CCAT archives & empathizing with the stories, projects, & conversations that were being shared. Functioning as a student organization with a high turnover rate enables consistent amounts of creative freedom among initiatives, therefore it is always unimaginable to see what the future generations will cultivate!

Throughout the last year and a half I have coordinated with several professors, staff & incoming students, mainly focusing on improving retention & increasing recruitment. Looking forward into CCAT's future; there are parallels among Emergency Relief amongst California's turbulent times is seeking energy & food sovereignty. I would like to thank Anh Bui for encouraging me to apply & for co-directing with me as well as Jacob, Casey, and Ben much love always to the CCAT fam bam!



# Co-Directors: Hellos & Goodbyes



Welcome Home! Michael & Justin playing rock paper scissors to claim their dream room upstairs

## External Co-Director: Michael Perez

My name is Michael Perez, I am a senior studying Environmental Science Management and Economics and I am the Spring 2020 Outreach and Event Co director. In Fall of 2019 I interned in the United States Congress at Panetta Institute. My time in Congress taught me how truly important it is for movements of any kind to be both uniformed and informed. I learned of the possibilities of what effective community organization and advocacy can accomplish.

I hope to bring HSU together as a uniformed entity to enhance the already in place community and advocate for the environment.



Michael floating atop the United States Capital



Justin reading his favorite book in the CCAT library behind the microcontroller

## Internal Co-Director: Justin Hawkins

As a new transfer student, I quickly found a home at CCAT. I was drawn to the creative chaos and inspired by how accessible the space can be. Before I knew it, I was processing upcycled wood, building deer fencing and making plenty of friends.

Coming from a big city and more bureaucratic academic institutions, it felt amazing to incorporate this raw creative energy into my academic career here at HSU. Seeing the Co-Directors, Casey, Ben, and Karina work so hard to keep this place afloat pushed me to contribute as much as possible. Now, I'll be taking on the challenge of Co-Directing myself next semester. As exciting as that is, the position comes with a lot of responsibility. I understand that not everyone finds CCAT as accessible as I did.

My goal over the next year is to change that, help CCAT become as accessible as possible, particularly to historically underrepresented students. As one of the largest Associated Student programs it is our obligation to ensure we are reaching the most folks as possible. Hopefully, you will join me in manifesting this dream next year!

# Meet the Staff



**Organic Gardener:**  
**Lauren Huesler**

I was inspired by how beautifully kept everything was and that the humans were thriving with the garden, not just participants in it. It was like a symbiotic relationship. That's when I knew I came to the right place. The new projects that I have been involved with include, seed saving, bed mending, weeding, pruning, mulching, listening, and gathering.

I loved working with the two hillside beds next to Buck House because it was just old grass growing and spreading seed. The good thing about gardening is noticing the ways the ecology interacts with each other and with animals and humans, that's one of the most rewarding things about being a gardener. Connecting and learning from those relationships and being intertwined is really a gift. When I initially started the bed, I was unaware of grape propagation on the far side of the bed. Luckily Jacob told me in time and I hadn't savagely weeded them out with the rest of the grasses. A moment when I thought "this is why I do what I do" is when Ben came out at night when I was weeding the yurt beds for open house and asked me how I was, while simultaneously weeding with me. Also, teaching volunteers knowledge on certain aspects of gardening they've never heard of. That's the best.

**Urban Homesteading Facilitator & Maintenance:**  
**Jacob Gellatly**

This course encompasses principles and surrounding ideas that support a more environmentally conscious lifestyle in the context of an urban setting. My favorite project has been the pig project. This started out as a shared idea between CCAT employees, Co-Directors, and CCAT community, to incorporate animals into CCAT. We then consulted with a local farmer who was previously a CCAT employee, and determined that raising pigs would be the most appropriate animals to begin with. The goal of the project is to demonstrate humane and regenerative animal care taking practices in a residential setting. We want to empower students to take responsibility for the production of their own food, and the management of their own waste. Additionally we want to raise awareness about the unacceptable conditions that many animals are being raised for food production. This project is also helping to build soil, remediating an abandoned greywater marsh site, and is also a natural building demonstration. This project relied on working with many different administrative bodies, and required extensive research, preparation, and paperwork.



# Meet the Staff



**Organic Gardening Facilitator:  
Charlotte Hadden**

This course entailed organic gardening theory, techniques and application. I was surprised most by the diverse amount of knowledge [my students] collectively held. I learned better organization of thoughts and time. The idealism and motivation of the people in the CCAT community inspired me the most to get involved for the first time.

**Green Building Co- Facilitator:  
Sara Keitly**

Green building is rooted in appropriate ways of utilizing materials to build a more sustainable and sometimes more decomposable structures.

During the class we have explored alternate cooking techniques and how historically cooking has affected culture. A goal of ours was to introduce a holistic building model. We constructed mini rocket stoves with local waste products. Our largest project has been an earthbag bench. This has taught many things, including how timely green building can be and how that inevitably brings community involvement. You don't need to be an expert to be helpful in green building. Soon we will complete the bench by using a lime plaster. This is more environmentally friendly, it takes much less energy and carbon dioxide to produce. Finishing this project will demonstrate a simple construction anyone can do on their own. We also looked differently at what it means to "build" and constructed a hugelkultur soil bed. The involvement and desire to learn from my students has been extremely inspiring. I am impressed with their eagerness and openness. Making teams has been great.

Out of the projects I worked on, a personal favorite was sheet mulching beds with wood chips and horse manure. I realized that everything takes more time than initially expected for the project. The amount of teamwork, collaboration and communication everyone shared was a good experience working as a team on the project. Some advice that I would tell someone who is visiting CCAT for the first time is to jump in and get to know everyone! Seeing plants thrive and people eating good food made it all worth it.



# Meet the Staff



## Indigenous Perspectives of the Environment Facilitator: Vincent Diaz

ENST 123 Indigenous Perspectives of the Environment included various Indigenous perspectives, experiences, and histories. While the main focus pertains to the environment it was not limited to just that. It also views the intersectional dynamics of Indigenous people, governments, and cultures. In addition to finding ways to work with and support tribal communities and sovereignty.

## Project Manager Intern: Marco Gudino

The first time I visited, I took a tour of the garden, greenhouse and was impressed by all the projects done here. What inspired me most were all the engineering projects and potential for more.

I have been involved with the data collection project in the greenhouse, the grey water pump, and natural green building. The data collection is exciting, we are planning to have a metro mini detect the humidity, temperature, and other data to find out how effective green building is.

My initial goal was to just get data on how much light hits the plants throughout the days, months, and years. This would determine which plants best suit that area, it turned into a data collection project. We hope to share this data on CCAT's website eventually. Working on a team has been great. I have many flaws and having teammates to help out where things were not all the way thought out is greatly appreciated.

I really enjoyed how much everyone was open and willing to learn about the course content. Sometimes Indigenous history and knowledge can differ so much from western narratives that it can be tough for people to digest. I learned that getting students to engage can be challenging especially when students are not familiar or educated in the subject. Rather than being focused in any particular project, I have focused on how CCAT can work with the Native community on and off campus. I think I have brought attention, concerns, and issues that are not voiced and present at CCAT. Which should be thought of as a learning curve rather on when working other communities. Understand the space you are coming into and don't forget the original stewards of the land and Indigenous people. Realize that power and privileges that are at CCAT and use those platforms to center Indigenous people.



ENST 123 class with guest speaker Skip Lowry

# Meet the Staff



**Events and Volunteer Coordinator:**  
**Reanne Meighan**

I first heard about CCAT during Spring Preview 2018 before I transferred. Building community inspired me the most when I first got involved. I've been involved with predominantly Harvest Festival during this semester. My initial goals were to get a diverse range of clubs to participate in Harvest Festival. We were able to get different clubs to join us and I think it was beneficial. I hope to build more connections with other clubs on campus. Everyone worked well together. Everyone helped me out given I started later in the semester. Seeing younger kids painting pumpkins at Harvest Fest made me think "this is why I do what do".



**Outreach Coordinator:**  
**Shayan Farzadpour**

I heard about CCAT during my first semester at HSU in one of my Environmental Studies courses. Honestly, it was the warmth of the people and atmosphere of the grounds that inspired me the most to get involved with CCAT. I have helped out with the gates and fencing, cob bench and the pig pen this past semester. Although I only contributed a small degree to the pig pen, it was probably the most fun to watch come into fruition. Do yourself a favor, gargle a little salt water every night before slumber and invest in a katana. They are kewl.

**Organic Gardener:**  
**Sebastian Forward**



I was most inspired to bring some direction to the gardens, to try and establish some themes for future gardeners to build on. I have initiated the establishment of the homegrown CCAT seed collection, the future edible water garden, the Ethnobotanical Teaching Garden, the tropical useful plant collection, various garden bed renovations, and the future CCAT gourmet mushroom cultivation chamber! My biggest project would be the Ethnobotanical Teaching Garden, where each off the terraces of the front garden are devoted to different regions of the world and filled with the plants domesticated there. My initial goal was to get as much variety as possible in the species of plants displayed, but I have since been working to find the plants that will grow reliably while at the same time teaching people about their food.

# CCAT Wins Student Sustainability Award

By: Austen Thibault

This summer, CCAT was honored with the Student Sustainability Leadership award at the California Higher Education Sustainability Conference (CHESC).

*“This award will spotlight an individual, program, organization, or group that has demonstrated real leadership in student-led energy efficiency and sustainability efforts. Award candidates will be engaged in campus activities that seek to leverage student interest and commitment to sustainability in order to increase energy awareness on campus; realize environmentally-friendly campus policies and commitments; and involve students in efficiency activities that compliment their campus’ goals and that result in measurable savings.”* – CHESC

“It felt awesome” to win the award, said CCAT External Co-Director Karina Coronado. She attended the conference in July at UC Santa Barbara, along with her fellow co-directors and a former co-director. (See photo)

The process began when CCAT was invited to do a presentation on their role as a student-led campus hub of sustainable action and learning. The invite came from Julia Feldman, the CHESC event coordinator, after she came to visit HSU and toured CCAT.

“I was extremely impressed,” Feldman said in an email, and encouraged the CCAT co-directors to come speak at the conference. The co-directors would enter themselves as speakers in one of several sustainability-based categories, which also put them on the radar for an award in that category.



Co-directors: Ben Nguyen, Jacob Gellatly, Karina Coronado, Casey Albarran

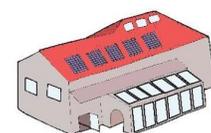


Photo pictured in front of CCAT green house & tool shed

“It was really hard to pinpoint a topic that we wanted to enter in,” said Casey Albarran, CCAT Internal Co-Director. “Food sovereignty, energy independence, there were a lot of categories we could’ve applied for...But we wanted to focus on more of the social aspects and leadership.”

“I think CCAT was chosen for the ability to have a very embodied way of living for students that isn’t found anywhere else really,” Karina said. “There are a few others, but they don’t have the same whimsical quirks of CCAT. (Winning the award) shows that there’s a larger need for these alternative education structures. CCAT serves as a model in multiple ways, depending on the community. We need alternatives to typical pedagogical settings.”

To that end, the conference served as a great platform to share the CCAT way with others. “I think the most exciting thing was **being in conversation with more CSUs, community colleges, UCs**—going beyond the Redwood curtain,” Karina said. “This is such a Humboldt thing, something you’d expect to find here. But being able to engage with different entities, faculty members, the opportunity to share it.... I was excited to have that cross-learning take place.”



# Dialogue on Race

## Interpreting CCAT's Mission Statement:

Inter-campus Intersectionality among Narratives of Sustainability in relation to AT & TEK

By: Karina Coronado and Amanda Madden

### What is with the series of Dialogue on Race articles in this magazine?

Upon stumbling on the 2015 AT Transfer edition on the CCAT magazine rack downstairs, Amanda and I began having conversations about the current cultural communication climate & general diversity of ideas & perspectives in this 41 year old student driven organization.

In 2015, there was an article on the last page of the magazine. It was titled, "Let's be Real...." This article was in conversation with the Multi-Cultural Center's annual week long series which is filled with workshops & speakers. The event is titled *Campus Dialogue on Race*.

After feeling inspired by the piece, we decided to expand on what felt to be important to address and expand upon.

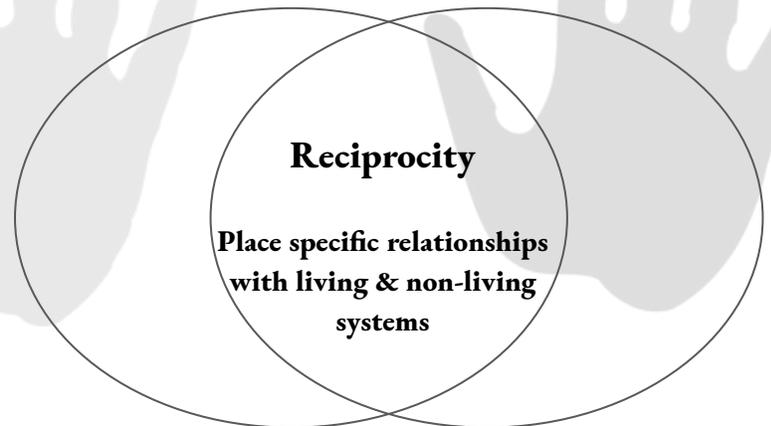
### Traditional Ecological Knowledge (TEK)

Is evolving knowledge acquired by indigenous and local peoples over hundreds or thousands of years through direct contact with the environment. This knowledge is specific to a location and includes the relationships between plants, animals, natural phenomena, landscapes and timing of events. TEK is an accumulating body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission. It transcends harmony with the living and nonliving. (<https://www.fws.gov/nativeamerican/pdf/tek-fact-sheet.pdf>).

### Appropriate Technology (AT)

The term was coined in 1973. When considering development ask: Is the technology built locally or does it use local materials? After built, can it be maintained? Is its use sustainable over many generations? Does it cause suffering in its manufacturing or use, human or otherwise, disproportionate to its benefits? (<https://ccat.humboldt.edu/>).

Appropriate Technology(AT) and Traditional Ecological Knowledge(TEK) share parallels among land/resource relationships although they contrast in reference to cultural narratives and demographics.



**How can CCAT navigate a privileged environmental standpoint and move into reconfiguring its mission to be more cognisant of the land we currently occupy?** What responsibility does CCAT have to the student body in regards to expanding the narrative of AT to support rising consciousness of our Native community in relation to HSU's current stand on sustainability? The growing nuances surrounding narratives of sustainability at HSU which operates as a microcosm given the wide range of academic disciplines is one reason. Considering the inherent principles of AT, **CCAT must ethically move toward honoring native tribes in Humboldt County** in order to continue to fulfill and expand upon notions of AT, in relation to CCAT & HSU.

# Dialogue on Race

## An interview with a NAS Student

By: Karina Coronado

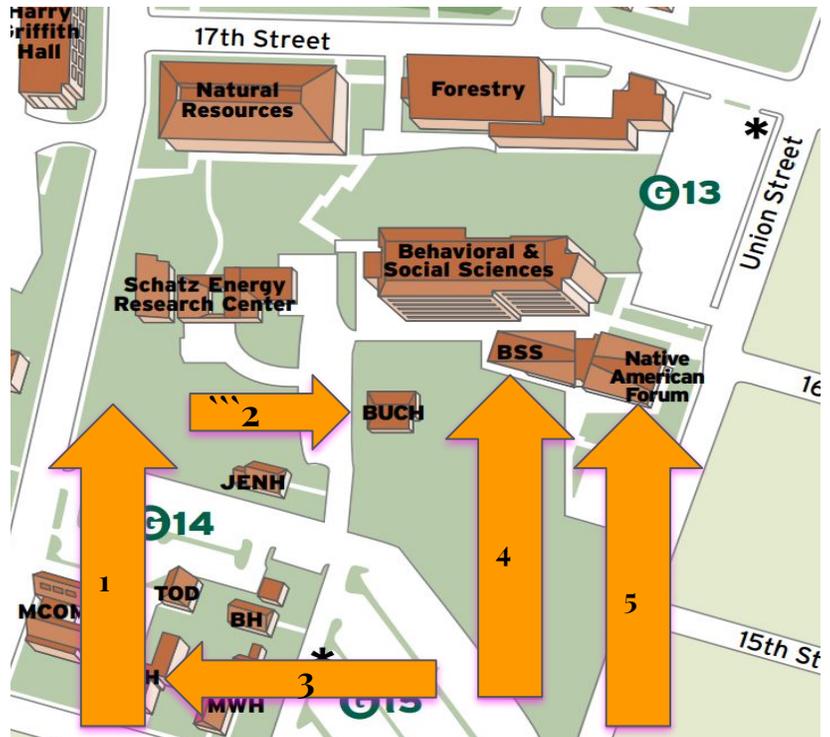
An interview with Vincent Diaz, former president of the Indian Teacher and Educational Personnel Program (ITEPP) club shares some tips for how non-Natives can aid in centering Wiyot land & beyond. Vincent offers a disclaimer which states that he speaks from his perspective and that he doesn't speak for all Indigenous people. Each tribe has a unique culture with differing knowledge and values.

### Culturally Responsive

“Ask the Wiyot peoples and other local tribes what issues and concerns are important to them. Organizations like CCAT should include Indigenous people in the conversation and use their platform to advocate for such concerns. Individuals can support and stand in solidarity with Indigenous people by advocating for the return of land, donating money to tribes or Indigenous organizations, and showing up for Native events. Standing in *solidarity* is *not sharing*. What I mean by this is give people support and agency to allow themselves to be successful rather than share resources that will keep them in the same position”, Vince states when discussing collaborations.

### Land Acknowledgments

Vince advocates *towards understanding more tangible ways of centering natives as well as reparation, “Going beyond dialogue and supporting the expansion of curriculum and objectives, one that voices concerns and better alternatives, and echoing programs [NAS] on campus”*.



HSU map depicting close proximity of all currently lead student food projects. What kind of impact would collaboration between these spaces look like? HSU Community Garden (CCAT & OhSnap)

1. CCAT Gardens & Residential Sustainability Lab
2. CCAT
3. INERSEP
4. Proposed Food Sovereignty Lab (NAS)
5. Native American Forum



Vince Diaz and friends during an Indigenous Perspectives on the Environment class

# Dialogue on Race

## Student Testimonies

### **Dealing with internalized oppression: having to break out of that space in order to get involved.**

Jazz: Internalized oppression is faded between the fine lines of normal behavior and unconscious suffering. Truthfully I can't count on my hands how many times I've become my own oppressor by using terms or carrying out actions that subconsciously affect my roots. Is it because of the community I was raised in?

Perhaps it stems down to our history of segregation within culture itself. Nonetheless, I know that it's easy to fall into the mindset that "this is not for me", "we don't do that hippie thing", because I am (x). Where in my soul book did it say to limit greatness? Nowhere. That's why I joined CCAT, I see their mission for something bigger than myself. No matter what color is on my skin, our earth exists in its glorious beauty and we all deserve respect and recognition in our place here. I am grounded and ready to receive the blessings that appropriate technology brings to you, me and earth.

### **These experiences reflect on how connected we feel with our environment and can influence our interactions with it**

Jazz: I feel as if my environmental consciousness has expanded through joining CCAT this semester and I only wish to see this cultivation within other people around the globe! Staying more local, I have never lived this close to the beach and forest and though I've had my fair share of time in both environments, now is the time that I understand how I can interact and do my part in preserving our gem. Life on earth is cool and I'm trying to explore and understand this planet before I am gone and one with it.

### **Diversity at CCAT into the future**

Amanda: There is no exact solution to solving something that spans a complex web of issues. How can we combat and change the minds of what has taken us years to rebuild? Rewriting history can't happen in a matter of days. Using our voices and continuing to speak will pave a pathway towards integration. Opening up a dialogue and bringing forth what makes us feel isolated is important. Breaking out of the internalized oppression of the mind by sharing our experiences as people of color are narratives that need to be heard and respected. We hope that diversity at CCAT, as well as other facilities on campus will increase as more platforms for voices established.

### **Racial Tensions Acknowledgment**

Klara: I noticed immediately that CCAT is a white space. Like any person of color, we feel excluded in these spaces. On top of that, everyone at CCAT knows each other and have these strong bonds furthering my exclusion. I decided to try out a volunteer Friday regardless since this is how I already feel at Humboldt State altogether and I fell in love with the place. I decided that very day that I will minor in Appropriate Technology. So now I volunteer every Friday, attend the club meetings, and help out with anything I am able to. It is unlike me to be so involved in a not-so-diverse space but I am too passionate about everything that CCAT has to offer. I even caught myself acting white in order to fit in. I decided that I am going to loudly take up space as a low-income Salvadorian woman. I hope that my bold appearance allows other people of color to feel welcome and make use of what CCAT is for.



## CLIMATE STRIKE SEPTEMBER 20, 2019

THERE IS NO CLIMATE JUSTICE WITHOUT BLACK JUSTICE. ENVIRONMENTAL RACISM IS REAL. WE MUST KEEP CLIMATE JUSTICE INTERSECTIONAL. ENVIRONMENTAL RACISM IS COLONIALISM. ENVIRONMENTAL RACISM IS GENOCIDE. ENVIRONMENTAL RACISM IS CAPITALIST EXPLOITATION. ENVIRONMENTAL RACISM IS DISPLACING INDIGENOUS PEOPLE. ENVIRONMENTAL RACISM IS WHITE SUPREMACY. ENVIRONMENTAL RACISM IS THE ESSENCE OF CLIMATE CHANGE. WE ALL HAVE A COMMON ENEMY. IT'S THOSE IN POWER; THIS CORRUPTS SYSTEM. WE CAN COME TOGETHER TOWARDS THIS SHARED PURPOSE; FOR INTERSECTIONAL JUSTICE ON AN INHABITABLE PLANET."

KLARA HERNANDEZ ENVIRONMENTAL STUDIES MAJOR EMPHASIS IN  
COMMUNITY ORGANIZING MINOR IN APPROPRIATE TECHNOLOGY JUNIOR -  
TRANSFER FROM LA

## Búsqueda de Palabras

AGUA GRIS (*greywater*)

COMIDA (*food*)

HERRAMIENTAS (*tools*)

PANELESSOLARES (*solar panels*)

ABONO (*compost*)

CASA VERDE (*green house*)

ESTUDIANTES (*students*)

JARDIN (*garden*)

BIBLOTECA (*library*)

COMMUNIDAD (*community*)

HORNO (*cob oven*)

PINTURANATURAL (*natural paint*)

## Tecnología Apropriada

P B L C P A J Y I C D P L Z U  
G I S N J K Y Z O Y X A D S Y  
L V N U M Y F M G Q G N P Q C  
D S A T N E I M A R R E H D G  
S Q A E U D W N A E W L M A V  
W E F G A R V L D A B E R D C  
U U T U U C A R W O V S N I P  
Q V T N K A E N E Q F S L N J  
O N O B A V G Y A A M O Q U A  
M N G M A I V R P T A L Z M R  
G Z R S L K D E I Y U A L M D  
U Z A O V I E U G S C R M O I  
Y C H F H S S T T L H E A C N  
B I B L O T E C A S J S S L Y  
T F T H P P N X J N E G F A X



The Multi-Cultural Center(MCC) tours CCAT & HSU Community Garden  
(Photo by MCC staff)

## Who is CCAT serving?

By Karina Coronado

### FACT #1

Hispanic/Latino students at HSU have the second highest number of enrolled students constituting **33.5% of the population**, while whites continue to carry the highest overall percentage of 44.6% , as of 2019. ([http://ie.humboldt.edu/fast\\_facts](http://ie.humboldt.edu/fast_facts))

### FACT #2

Additionally, CCAT is the **2nd highest funded program** behind the Youth Educational Services(Y.E.S.) under the program II category for Associated Student. Being that A.S. is partially funded through student's tuition.

### Conclusion

It is out of significant reasoning & fact that CCAT is reconfiguring varying approaches to be *inclusive of varying languages, cultures, & overall accessibility of this student managed & funded space.*



# UPCYCLED JEWELRY

Isabel is an artist, and past CCAT Co-Director, who turns used or unwanted things into jewelry. Both their bottle cap (beerings) and film slide earrings are bright, resilient to almost all types of weathering, and can take many shapes. Their identity as a gender non-conforming, Latinx person contributes greatly to the work that they like to create.

Growing up with a grandmother who repurposes almost everything, Isabel learned to reduce waste and maximize use early on in life. For that reason, they've dedicated their existence to helping fellow QTPOC in any capacity, making art that reflects their childhood and values, and reducing their carbon footprint. They look forward to supporting QTPOC by donating \$1 from each purchase to Black and Pink.

**Follow Everything Cycles on IG:  
@EverythingCycles & on Etsy at  
[Https://www.etsy.com/shop/EverythingCycles](https://www.etsy.com/shop/EverythingCycles)**

By:  
Almond  
Dodge

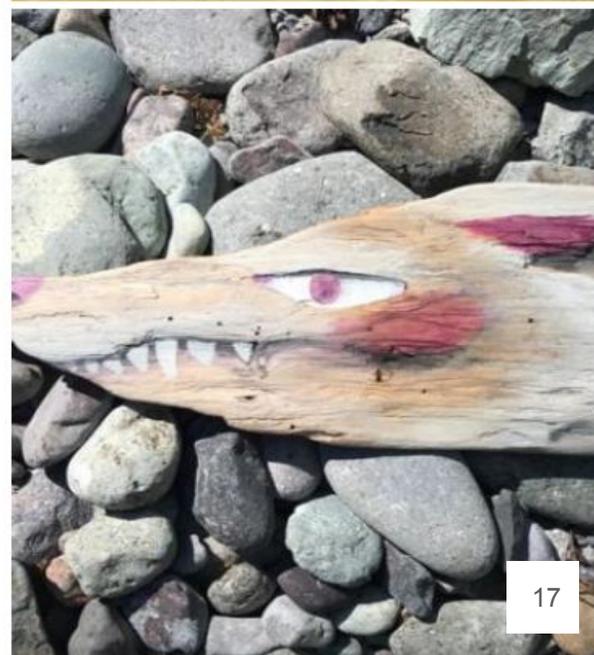
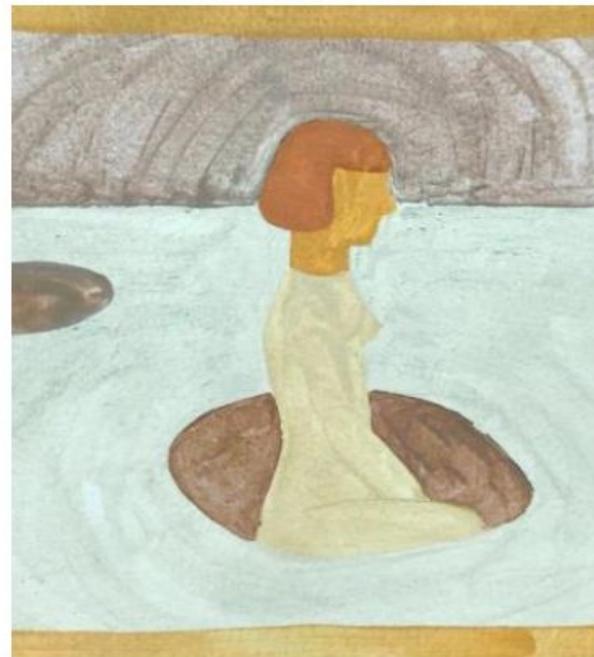
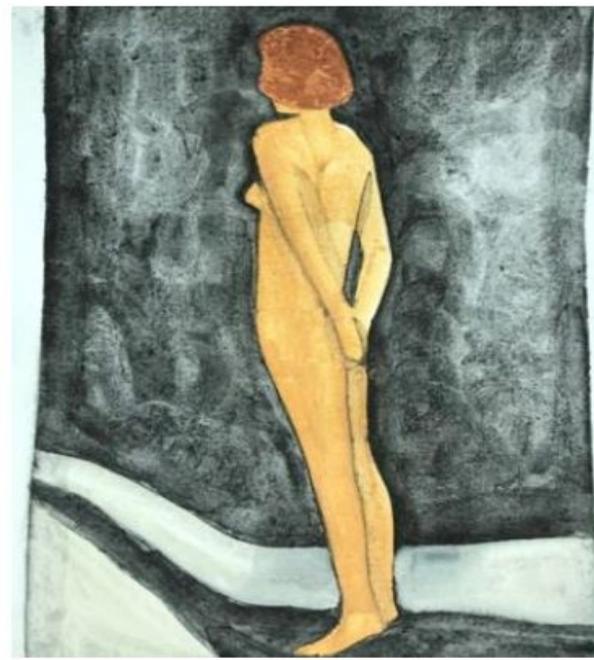
# Natural Painting

Making art is a lot like science. It involves curiosity, experimentation and discovery. I try to weave natural science into my artwork as much as I can, and working with natural pigments is one of the most basic ways to do so.

My work with natural pigments started with my grandmother's purple bearded irises. When the blooms were spent they appeared to melt and drip, like an ink. I mashed a few into some water and dipped my brush in. It was exhilarating to paint with and watch how it dried. I've since experimented with smashing flowers directly onto paper with good results.

More recently I've started working with clay pigments. I spent a lot of time creek walking this summer. I began collecting colorful pebbles, as I do, looking specifically for those that were soft and chalky. Then I ground them against a large, rough stone and collected the powder in a palette. I simply wetted this powder and began painting.

Later in the summer as the berries ripened, I started painting with them too. The Oval-leaf blueberry makes my favorite fuchsia to violet paint.





For more details about the requirements, visit [reallygreatsite.com](http://reallygreatsite.com). For inquiries, contact us at (123) 456 7890 or at [hello@reallygreatsite.com](mailto:hello@reallygreatsite.com). Working with these pigments often introduces an element of surprise. You can't anticipate how they will dry or react with the surface. You release control by using natural pigments, which is something I strive for in my art. Many of the paints available at stores today are made with petrochemicals, so they're basically plastic, and non-degradable. Many are toxic. Before the industrial revolution all pigments used in art were naturally sourced. It can be as complicated or as simple as you want, depending on how far you want to take it. The idea is simple: find available pigment in any object, and apply it to your purpose e.g. painting or writing. Children know how to do this without being instructed. I camped with some kids this summer who made a ton of black ink by mixing water with charcoal in a fire pit, and stirring it like a cauldron with big sticks. Many of us have childhood memories of drawing on big rocks with smaller ones, or finger painting with mud. That's the type of energy you're tapping into when working with natural pigments. Collecting, processing and using pigments from nature is a way to cultivate a relationship with your landscape. Get to know the world around you on a deeper level. The environment informs your color palette. I'm just getting started, and I've got a lot more exploration and learning to do. [wildpigmentproject.org](http://wildpigmentproject.org) has been a very valuable resource for me learning how to work with these materials.

You might find it useful as well. Enjoy the exploration. [@reallygreatsite.com](mailto:hello@reallygreatsite.com).

# PRINTMAKING @ HSU

BY TORI LAWTON

## Linoleum Block Printing:

*Step 1:* Prep your paper by cutting it to the appropriate size and decide how many prints you'll want to make. Draw your image onto a linoleum block and carve away the parts you want to be white once you print.

*Step 2:* Apply your ink to the carved block using a brayer. Make sure not to apply too much ink or too little. You can test this by checking the block (if it's shiny, you're over inking and if it's patchy, you need more ink).

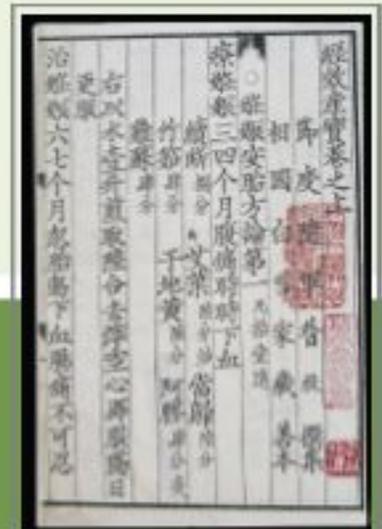
*Step 3:* Once you're happy with your block first lay down the paper on the press, then lay your block facing down in the direction you want. Then run your block through the press by cranking the handle

*Step 4:* Slowly peel your block off the paper and you have your first print!



## IDEAS:

- Create stamps to decorate old folders and notebook
- Print patches to sew onto bags, jackets, etc.
- Use fabric of old t-shirts to print on
- Print on light-wash denim, wood, and other materials besides paper



**Sustainability & Printing:** Printing can be utilized to make use of old papers, notebooks, and other materials by giving them a new life with a new design. Stores like Goodwill and Dollar Tree are great places to find affordable school supplies, and with printing you can add your own art to make supplies feel more personal. The same can be done with clothing! Thrifting and printing go well together because printing allows you to customize pieces to fit your style. An idea for this would be printing on old t-shirts, cutting out the patterns you print, and sewing the patches onto jeans, jackets, or bags. This method can be seen at CCAT where we up-cycled old t-shirts using prints to make them our own. Because printing is so versatile you can print on most materials, including wood, fabric, paper, plastic, straw, clay and ceramics. If you don't have access to a printing press you can print by creating stamps and stencils.



**TIPS:**

- Practice makes perfect! Print as many times as you can before printing your final product. Use newsprint for your practice prints and take this time to find a good ink level to apply to your block.
- Focus on the edges of the block and small crevices that the brayer might miss.
- Be patient when carving. Use a small practice block if you can to get a feel for the carving tool. Slips are normal and can become new details in your print.
- **IMPORTANT:** the image you carve will be mirrored when it's printed on paper!

# GREENHOUSE CLUB

BY PHOEBE HUGHES

Plants, like so many organisms, are unbelievably complex and speak a language we don't yet comprehend. We know they communicate through a fungal network underground and by sending and receiving "smells", but we haven't even begun to scratch the surface of comprehending the nature of these unusual creatures. I decided to major in Botany to understand their complex interactions and preserve species diversity by keeping endangered plants from blinking off the face of the Earth while nobody was paying attention. It's something that needs to be done and I've been told it's a "respectable" and "noble" goal, but the one question I'm asked over all others is, "okay, but what will you do for a career?"

We have come to live in a world where you need money to survive, and there's very little money in saving the world. Of course botanists are hired to seek out plants with certain practical compounds, but there's much less of a chance of being hired to save anything that won't directly benefit us. What I very quickly came to realize is that people assume the only reason to keep plants around is for ravenous consumption in the quest to better the human race. The only reason anyone would possibly be concerned with species diversity is to preserve the possibility of finding new compounds we can exploit for personal use.

It's important to understand the inherent value of the natural world. We need to conserve biodiversity because we're not the most important organisms on the planet, and we have to start acting like other things live here. So stop thinking "maybe we'll find a way to use it later" and start saying "they're just as unique as we are and deserve a place among us whether we can 'use them' or not".

And for those of you already in this mindset, keep fighting for it. The fight isn't over until we stop trying. You can get another job to sustain yourself, but don't give up the fight to sustain the world.





## Zero Waste Conference Trashion Show

Nov. 12, 2019

**It is an honor to represent CCAT at this year's Trashion Show. Knowing exactly what it is I jumped at the opportunity. I have been following this inspirational trashionista on Instagram (@misselizabethtran) who advocates for zero waste and sustainable fashion.**

I went to American Cancer Society Discovery Shop to find a thrifted dress to sew my trash over since designing a dress from scratch is very challenging. I love to sew but far from being a pro. It took three days to complete my outfit. Finally, the day has come. I got on stage and the host read my entry: "My dress is made of plastic bags from recycling donated by my church family. Since they didn't recycle I decided to start a fundraiser and get everyone to bring their recycling from home. I raised over \$500 so far to help the homeless. The project remains ongoing while I'm here at Humboldt. Underneath the bags I have

Amazon plastic pillows from my mom's scare packages she sends me. The trash problem bothers me. I'm inspired to start a nonprofit and upcycle the trash to raise money for social justice." appreciate that the audience was so supportive. I sewed on plastic bottle caps (that I poked four holes in to make them look like buttons) on the belt part of my dress and heels. My hoop earrings are made up of aluminum can openers. It was really cool to win under the category of best theme: the future. I would have thought Wall-E would've won that one but now it makes sense. Trashion is growing to be very popular. It is its own form of resistance against corporation greed of unsustainable packaging spreading awareness. I can't wait for next year!

# HSU Mycology Club and CCAT Collaborate on County-wide MycoRemediation Project

The Mycoremediation sect of HSU's Mycology Club has established a hands on project that unites a variety of campus and community organizations. The group aims to use a species of the invasive European Beach Grass, *Ammophila arenaria*, as a medium to cultivate fungi.

## On the Beach Grass:

*Ammophila arenaria* was established on the coast of Humboldt County in the late 1800's to stabilize the dunes and prevent them from moving onto railways, roads, and other areas of development. This grass is relatively fast growing and quickly outcompetes native dune species. In just over one hundred years this grass has grown to cover a substantial portion of the Humboldt County coastal dunes.

Local organization, Friends of the Dunes, has been facilitating volunteer manual removal sessions to disrupt the spread of *Ammophila*. This has proven to be the most practical method of removal. The result is, however heaps of beach grass piling up on the dunes. The grass is slow to decompose and takes up space that could be habitat for native plants and their cohabiting critters.

## HSU MycoRemediation:

The Humboldt State Mycology Club has presented a solution for the resulting excess organic matter from *Ammophila* removal and has spent the Fall 2019 semester in the beginning stages of initiating the project. They are collaborating with CCAT to create an interactive mushroom bed. The beach grass will function as a medium for mushroom growth.



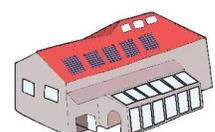
Club members manually remove beach grass from the dunes. This aids in the Friends of the Dunes' mission as well as the mission of our own organization. Local mushroom cultivation company, Mycality, and mycoremediation organization, Fungaia Farms, have agreed to sponsor to club with pre-inoculated materials to jump start our project this fall.

The interactive box will be a bed of *Stropharia rugulosa*, the Garden Giant, a mushroom known for being a competitive decomposer as well as a gorgeous specimen. Hinged doors on the front face of the box will reveal fiberglass windows in which students and community members will be able to peer "underground" where the mycelium of the fungus is hard at work breaking down the grass.

Club members will also be inoculating bales of beach grass with Oyster mushroom, *Pleurotus ostreatus*, so that we can observe the rates at which different organisms break down the beach grass.

The mushroom bed will require maintenance in future semesters. Members will continue to participate in volunteer removal sessions in order to feed the needs of the fungal organism that resides in the box. This project will likely lead to further remediation projects regarding appropriate applications of the beach grass and the other fungal organisms.

By: Copper, CJ



# Harvest Festival

By Reanne Meighan

Harvest Fest is CCAT's largest event of the Fall Semester. It is a celebration of the changing of the seasons and a way to build community. Harvest Fest was held on Friday, Oct. 25th, from 12-4pm at CCAT this semester. We had over a hundred guests, volunteers, and employees attend and participate in the annual festival. A variety of food was offered throughout the event, such as our famous cob-oven pizzas. We had music from Shayan, El Nene Chulo, Tygar, KRFH, and Los Dune Bums. Compost Tea by Justin Hawkins, Home Canning Demonstration by Sebastian Forward, and Pig Raising with Local Tule Fog Farm by Shail Pec-Crouse were all workshops held during the event.

WRAAP hosted a clothing swap to promote second hand fashion. Check-It tabled and gave students the opportunity to be a part of their Love Knows Boundaries Campaign. The Multi-Cultural Center (MCC), Womxn's Resource Center, El Centro, Earth Week Every Week Committee, CCAT, Bicycle Learning Center (BLC), Environmental Studies (ENST) Club, and Green Campus were all clubs that participated in Harvest Festival. While Harvest Fest is our annual event for Fall Semester, we look forward to seeing you at May Day Festival, our annual event of the Spring Semester.



Little brown mushroom and friend collecting soil for Compost Tea workshop



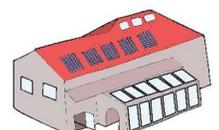
Sebastian demonstrating Home Canning



Co-directors welcoming guests



Friends skanking to the jams of Los Dune Bums, a local surf punk cumbia band



# Rocket Mass Heater Cob Bench

The Rocket Mass Heater Cob Bench is an ENGR 305 project that was proposed by the 2018-2019 CCAT Co-Directors and was carried out by the student team of Ben Nguyen, Michael Perez, and Aidan Bellow. This project demonstrates function stacking through natural building and provides an interactive learning opportunity for students and community members. Let's unpack how this Sea Cat works...

## Rocket Stove

A rocket stove is an extremely efficient wood burning stove that utilizes a contained combustion chamber and draft to burn up to 80% less fuel than an open flame cook stove. The heat is drafted up a firebrick chimney that is placed underneath a metal drum, the top of which becomes the cooking surface, and is then drafted through the rest of the system in stove piping. Since this type of stove burns so hot, there is little to no smoke exhausted when operated efficiently.

## Mass Heater

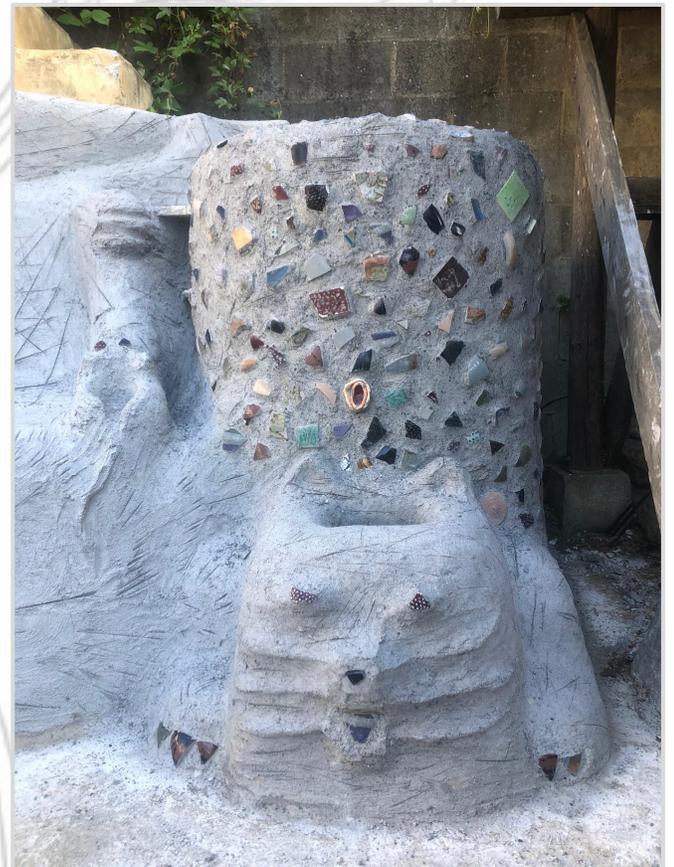
The stove piping is layed out underneath the seat the the bench and covered by earthen materials. The heat inside the stove piping is transferred into the earthen material by conduction and a process called thermal mass. Thermal mass is the ability of a material to absorb and store heat energy. Since this bench is made of materials with high thermal mass, the heat from the stove piping will warm the sitting area.

## Cob and Lime Plaster

The bench was constructed with a building material called cob which consists of clay, sand, and straw. The sand acts as an aggregate, the straw provides tensile strength, and the clay holds everything together. This material is identical to adobe but is constructed in a monolithic form rather than in bricks like adobe. Once cob fully cures it becomes stronger than concrete yet is able to flex and is less susceptible to structural failure than concrete. A plaster consisting of limestone, sand, and sheep's wool was applied as an exterior weathering barrier. This style of plaster was chosen for its strength and 'breathability' or willingness to allow moisture vapor to pass through its semi permeable texture. This will be less likely to deteriorate over time as the cob core of the bench allows moisture to move through it.

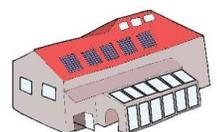


The RMH bench with  $\frac{3}{4}$  lime plaster coats



Feed chamber, stove top, cup holder, and shelving.

By Ben Nguyen

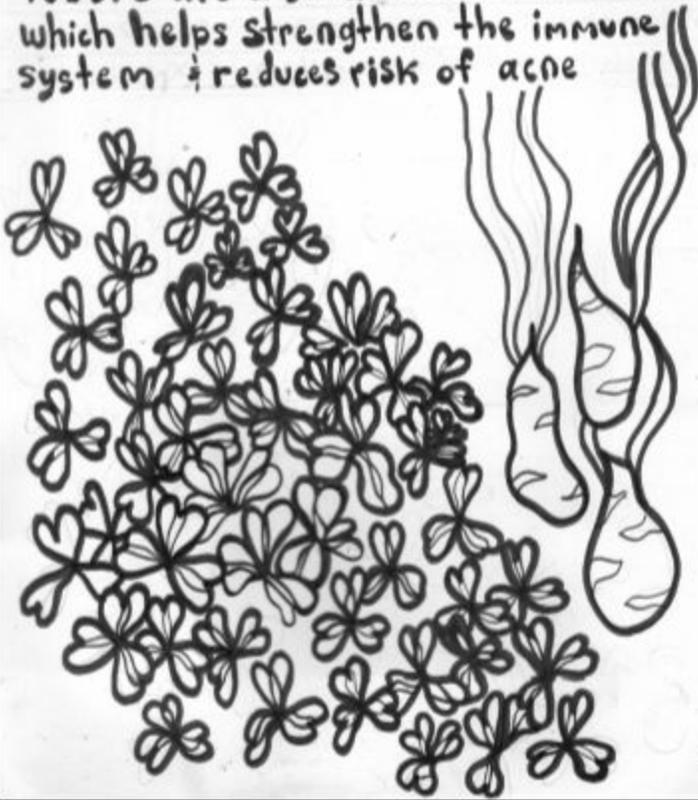


# Hearty Plants at C CAT

Coloring Page!  
Eloisa Garcia Caro

## Oca

Scientific name: *Oxalis Tuberosa*  
Colors: Green leaf & neon pink & orange tubers  
Tubers are a good source of vitamin A,  
which helps strengthen the immune  
system & reduces risk of acne



## Quinoa

Scientific name: *Chenopodium Quinoa*  
Colors: Range in color from white to  
yellow, pink, red, purple or black  
Edible seeds are a good source of grain  
& protein.



## Sunchokes

Scientific name: *Helianthus Tuberosus*  
Colors: Yellow Petals  
Under the sunflower classification: Edible  
tubers that taste like a cross between  
artichokes & potatoes



# Physical Site

By Reanne Meighan

## Pond

An ongoing project for the physical site has been the pond. CCAT aims to develop it into an edible water garden. In the future, plants will be placed into the pond. Some of the plants will be rice, taro, water lotus, and water chestnuts. Currently, the pond contains cattails and pennyworts.



Garden Pond

## Garden

A diverse selection of plants is planted at CCAT. The garden and surrounding area contains a variety of annual, perennial, and biennial. The ecological terraces and greenhouse are prime examples of plants CCAT has that came from different regions of the world.

The ecological terrace represents the biodiversity of plants grown worldwide. Each level of the terrace represents the different part of the world. The ecological terrace has plants that are native to Europe, Asia, South America, and Africa. Some of the crops harvested this semester were chickpeas, pink buckwheat, tuber crops from the Andes, and edible tuber dahlias, which are native to highland Mexico.



Array of Tropical plants in the greenhouse



Cucumber flowering in greenhouse



Ecological Terraces

## Pigs at CCAT

Pigs will be at CCAT! Two kunekune pigs from Tule Fog Farm will live at CCAT as a way of demonstrating urban homesteading. The pigs will be living in their pen on the lower portion of CCAT. Pre-consumer food scraps from the J will be diverted from landfill and feed the pigs instead. Animal husbandry is one aspect of urban homesteading. With help from ENST 123 Urban Homesteading class, CCAT Staff, and volunteers we were able to create a pig pen for the two pigs and have it ready for their arrival.



East side of Pig Pen

## Greenhouse

The greenhouse has begun to be home to a new tropical ethno-botanical collection of plants. These plants are native to tropical regions such as Costa Rica, Puerto Rico, and Hawaii. This will become a more permanent section of the greenhouse. The other side of the greenhouse will consist of seasonal plants. This is the side closer to the outside gardens and will be used for harvesting crops and greenhouse demonstrations at CCAT.



North entrance of Pig Pen

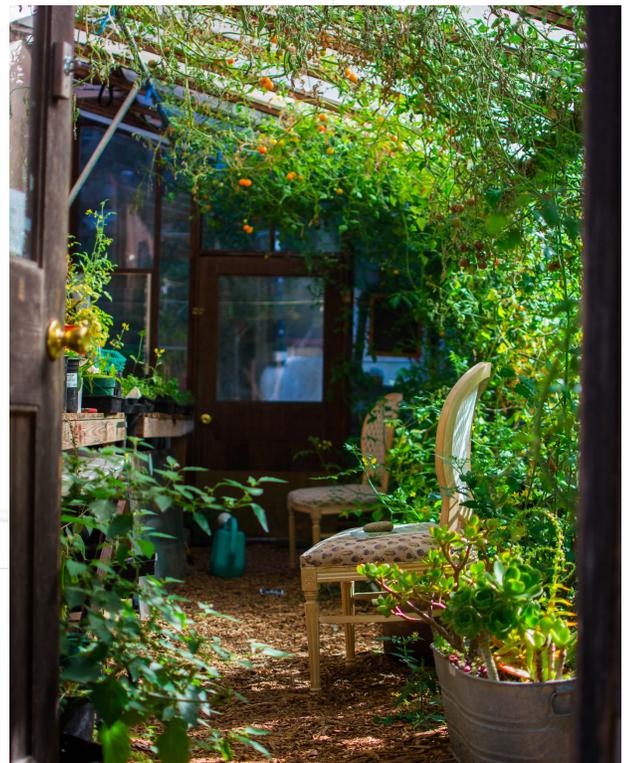
## Greywater Rope Pump & Earthbag Ring

The Greywater Rope Pump & EarthBag Ring is a collaborative project, with help from Jacob, Ben, and the ENST 123 Green Building class. Sand and clay were used to fill the bags and it is currently in the process of lime plastering. Most, if not all, necessary materials were from CCAT!

*"It was a holistic lesson for the class in learning a need, designing a project, doing the math, and continuing project. All the hands that helped with this project are making for a beautiful and artistic structure."* – Sara Keilty, ENST 123 Green Building Co-Facilitator



Members of the ENST 123 class & co-facilitators in the middle



Ripening cherry tomato vines in the late summer



## Homemade Yerba Mate Recipe



By Ava Guillen

Yerba mate is an all natural, most times organic, caffeinated tea. This natural herbal tea is made from the plant, *Ilex paraguariensis*, and is also rich in antioxidants, aids in digestion and is a natural energy booster. The most familiar interaction most have with yerba mate is with Guayaki's canned or bottled caffeinated drinks. Although Guayakis taste great, they are loaded with sugar- most of the time containing around 32 grams per can and also contribute to your own personal consumer waste. An easy alternative to constantly buying one of these \$2.99 cans or bottles would be to start making your own! Not only does that help you save money, but it also allows you to package your drink in a more eco-friendly way.

I recently switched from constantly buying Guayaki Yerba Mate cans and bottles to making my own homemade yerba mate iced tea blend. Most weeks I would buy up to four or five cans of Guayaki, which averages out to about twenty dollars per week! In efforts to cut back on my spending I looked into what it would take to start getting my caffeine fix right at home. The traditional way of consuming yerba mate is by drinking it straight from a gourd filled with hot water with loose yerba mate leaves, and is commonly sipped using a metal straw that has a filter at the end of it to strain out leaf fragments. But, like most college kids, I am often pretty busy and am looking for a convenient drink that I can drink on the go. This is how I came about developing my own homemade yerba mate recipe:

### **Recipe: yields- 1 gallon of iced yerba mate tea**

- 1 gallon of boiled water
  - 1-3 cups of loose yerba mate leaf (depending on how much caffeine you prefer)
- Optional ingredients:**
- Handful frozen blueberries
  - Other loose leaf teas to steep with the yerba mate (i.e. calendula, lavender, peppermint, sweet orange, etc.)

### **Instructions:**

- Boil the water
- Using some sort of tea strainer, steep the yerba mate in the water for at least 10 minutes  
~ If you are unable to steep all of the yerba mate at once, do so in portions  
\*optional\* simultaneously steep another loose herb of your choice for added flavor  
\*optional\* Add frozen blueberries to add flavor to the iced tea

That's it! After letting the tea cool to room temperature, put it in the refrigerator. It should be good for up to 2 weeks! I like to use a big pitcher gallon (as seen in the photo) to store my tea, that way I can just take a mason jar to it and fill it up as much as I need!

# CCAT Club

By: Sophie Maga

It has been a full year since the CCAT Club was revived and continues to highlight the opportunity for people to exchange ideas, bring projects to fruition, and embrace sustainable living on and off campus!

The CCAT Club mission is to **bring people together** around the ideas of the Campus Center for Appropriate Technology (CCAT) and to explore new ideas together. The Club is recognized as one of the main volunteer entities, with students and community members being active participants. Volunteer activism engagement stretches from upcycling activities such as making wind chimes out of bamboo and oyster shells at Tinker Time during the Zero Waste Conference, to participating in community works like Food Not Bombs and the Global Climate Strike.



First Fall club meeting of the semester

## ***Sophie Maga, Club President: What kind of opportunities the Club provides***

“With how many resources CCAT offers, I think the club is a great opportunity to explore what you may or may not be interested in or learn about resources you didn’t even know were available! It also gives you the opportunity to reflect on your personal strengths or interests and to apply them in a way that contributes to environmental, social, and economic implications. You have the freedom and ability to cultivate as much as you want, when you want, and how you want in a group that encourages and supports creative interests.

Within my personal experience the club has provided me with opportunities to; gain leadership skills and qualities, meet incredible/influential people, become more efficient in time management and collective organizations, to grow as an individual and expand my ideology/interests surrounding Appropriate Technologies.”

# Special Thanks!

Employees, Volunteers, and Club Members

Associated Students

James Graham, CCAT Advisor

[appropedia.org](http://appropedia.org)

