

Voices From Our Network The Civic Scientists

The next generation of continuous living cover (CLC) researchers reflect on the current moment in history and reimagine the future.

Hannah Francis, Dana Johnson, Margaux Crider, Kase Wheatley

2020

"You can't say you're sovereign if you can't feed yourself."

In this statement, Winona LaDuke, an internationally renowned Ojibwe activist, makes clear the relationship between "sovereignty" and the need for community justice in stewardship of the land.

We are a collective of graduate students, some in soil science and some in agroecology, grappling with "conventional" "traditional" assumptions and underlying food systems in the United States. We envision a world in which food sovereignty is the system, rather than a deviation from the system. This world view calls for a radical shift from the extractive, input-intensive systems that dominate midwestern farmlands to cropping systems that work with the land and rely on collaborative relationships between people and the land they farm. We believe that engaging conscious global citizens with agroecology as a science, movement, and practice can bring this vision to fruition.

Our work in Agroecology is to further embed collective resilience and justice within agriculture and the food system. In addition to our country's racial injustices, rural communities face unique, often invisible, challenges: rural flight, unemployment, insecurity, farmer suicide, and the widespread opioid crisis. If we are to truly work toward racial and social justice, we must weave strong social threads into the ecological fabric to ensure agroecosystems work for the communities which they purport to serve. In other words, agroecology is also about what happens off the farm; it pushes us to think holistically and critically about what makes for a healthy and just ecosystem:

access to affordable healthcare, affordable education, clean drinking water, addressing wealth inequality/redistribution of wealth and property, and reparations for those historically disenfranchised by our food systems. A healthy and just ecosystem means a healthy and just community through self-sufficiency and sovereignty.

Food sovereignty is inextricable from the fight for racial justice. From whom was this land taken? Who currently has access to land? Who benefits directly from the research of continuously living cover (CLC) crops and cropping systems? Who doesn't? The answer is that our current food system does not work to benefit Black, Brown, and Indigenous people in the United States. Instead, our food systems research often looks for a band-aid solution rather than a radical ecological and social reimagining of current cropping systems. For example, our graduate work includes investigations as to how cover crops (red clover) with continuous corn, or with corn-soybeanwheat cropping systems, can reduce the amount of synthetic nitrogen fertilizer we might apply to those systems. Many in our fields deem this technique as "sustainable intensification"; but frankly, there's nothing sustain-able about it. Ecological and social resilience are intertwined; neither can succeed without the other. If our "systems analysis" of agriculture doesn't include the people working in those systems (often immigrant and/or Black and Brown peoples), we are perpetuating racial hierarchies and the general inequality between owners and workers.

As young scientists, it is our duty to engage with multiple ways of knowing to actively expand our framework beyond western, colonial scientific thought. Though traditional ecological knowledge (TEK) is not part of a standard agronomy education, we urge our educators to recognize the importance and relevance of this diverse body of knowledge. To learn TEK, we must be in conversation with the land and the people who hold this knowledge, including the farmers working the land. For some of us, this conversation involves the land where we conduct our graduate work. In Wisconsin, we know that much of land was stolen from the Ho-Chunk not so manu generations ago. We need to listen to the communities we work with and engage with participatory research in disciplines that rely entirely on the western scientific method. As academics and engaged scientists. We are responsible for using our privileged position to center the voices of and give power to people who are, and have been for generations, marginalized and oppressed by our current systems. We want to live in a world where we expect to build. not degrade, our soil, and where the rhetoric coming from our administration is not "go big or get out." As we engage with agroecology as North Americans, we need to hold our field to its original founding doctrine that social justice is inextricable from the land.

Also inextricable are the consequences of climate change for agriculture and social justice. It is no coincidence that vulnerable and impoverished populations disproportionately feel the effects of climate change. In Wisconsin, we expect to see higher degrees of uncertainty in weather patterns and more frequent extreme precipitation and extreme drought

events in the coming decades due to climate change. Our current "conventional" system of agriculture is wholly inadequate to face this reality.

In response to this omission and environmental incoherence, our work within agroecology focuses on developing farming systems shown to sequester carbon and enrich soils to mitigate climate change while still prioritizing food sovereignty and security. Food systems should foster nutritionally and culturally appropriate diets. A system like this engages with diverse systems of agriculture from conventional row crop farming to indigenous practices such as agroforestry, polycultural rotational systems, and crop and livestock integration. These key practices can capture carbon and regenerate the soil, unlike the chemically-intensive, extractive agricultural practices that dominate the landscape.

It's time to embrace regenerative agriculture to reimagine and enable a system that centers food sovereignty. Donna Haraway says in "Staying with the Trouble" that we are all just varying stages of compost. Our compost piles in the backyard give us hope— the hope that we can simultaneously rebuild depleted soils and depleted communities. We must deconstruct and unlearn much of our present understanding of the land. Watch as these kitchen scraps of the past crumble. Watch as we grow a future more nutritionally accessible, regenerative, and powerful.





University of Wisconsin - Madison

Hannah Francis, Dana Johnson, Margaux Crider and Kase Wheatley are a collective of graduate students in agroecology and associated disciplines at UW Madison. In addition to the particularities of their individual research pursuits (ranging in discipline from soil science to community and environmental sociology), they are all grappling with "conventional" and "traditional" assumptions underlying food systems in the United States. With a shared vision of a world in which food sovereignty is the system, rather than a deviation from the system, they chose to write this piece collaboratively.