

All We Can Save: The Experts

It began for me at a local vegetable and flower farm in Maine; age 12. I showed up to work on the first day and was surrounded by middle aged men. They were intimidating. The owner just about broke my hand when he shook it. He told me to hop in the bed of the truck and he'd take me to my first job of the day, but after that, I'd have to get used to driving the trucks myself.

I had always thought of farming as a sort of fairytale; like the salad in front of me was grown in the midst of a snowwhite or cinderella scene, where the Earth is peaceful and flourishing. The farm *was* magnificent. The sun, fields of green, rolling hills with plants dancing in the wind. My first job was to walk ahead of a tractor and grab 25lb sandbags from the bucket in the front and throw them on the ground, every five feet, for a quarter mile, along the largest corn field, there and back. We rolled out this giant, beautiful sheet of fabric called reemay, and held it down with the bags. It was supposed to help as a windbreak, keep bugs out, and keep heat in for the corn. I was absolutely exhausted by the end of the first day, but I still believed in the fairytale.

Less than three days later, the new sheet, worth a few thousand dollars, had been torn and ripped in multiple places. The wind got underneath a few small rips and took that sheet for a ride. The small corn plants took a serious beating as well. On our lunch break the owner explained how these giant sheets used to last upwards of five years but they could no longer compete with the increasing severity of storms and wind on the farm.

I am now 21 and have spent every summer season working that same land in a changing climate. I have watched a parasitic weed (what we call strangle weed) increasingly spread every year, amongst increasingly unpredictable weather. Two seasons ago, an unfamiliar cold, wet

spring brought disease and killed off the majority of the first crop. Last season, severe drought dried up one of the largest ponds on the farm that is used for irrigation. It was the first time this family had seen the pond dry. They have farmed the land for three generations. It was also the first time in almost 20 years that the entire state of Maine was in a moderate-to severe state of drought at one time (Sambides 2020). The average temperature in Maine in the summer of 2020 was also the 3rd hottest on record for the past 125 years, beginning in 1895 (Birkel 2020).

Until I was able to drive myself, I was dropped off at the local farmers' markets with a truck bed full of produce, tables, a tent, and cash. I have heard millions of stories from the farmers' markets over the years. I have told quite a few, but the markets' are a special place to sit back and learn from those around you. Building relationships and storytelling (or storylistening) over the years confirmed the collective struggle of farmers in a changing climate near my hometown.

I remember when the seacoast growers association discussed shutting down a market in an extremely low-income area. That's when I started questioning: The farmers are not making enough money in the low-income areas and the logical solution is to cut off the low-income areas from fresh produce and move where profits can be made? Parts of the seacoast community were given unequal access to local, fresh produce, and that observation holds true today in communities worldwide. It's not as easy as the farmer just choosing where they want to sell their produce, or locals choosing whether they want to buy produce. Intertwined social and economic systems under corporate domination make those decisions ahead of time.

When it comes to climate change, all that encompasses climate change; the causes, the effects, the science, story coverage in the media; it is all intertwined under similar corporate domination too. For most of my life, I've been told to leave certain subjects "to the experts." But

recently, discreditation has undermined the voices of many experts, and people are lost. Climate change is one of those things I have been told to leave to the experts. What do the experts say? What do the other experts say? But I ask: Who owns that research company? Who owns that news station? Who's donating to that ad about climate change being a hoax?

The experts are shifting in the climate movement. Our most marginalized communities *are* our climate experts. Our local artists, writers, farmers, teachers, observers, collective learners, healers, humans, and non-humans, are our experts. A plethora of climate experts exist within our communities already. Consider the one family farm I work at in Maine: just within that one family, they have generations of local climate data. But climate solutions do not just pertain to knowledge about weather.

Low-income, and especially low-income black communities, disproportionately do *not* have access to fresh produce. But many of those communities have been actively reclaiming and redefining their local food systems for decades. Frontline communities experiencing the effects of industrial agricultural methods like monocrops dependent on pesticides and fertilizers, have been actively reclaiming their food sovereignty, through seed saving and sharing, fighting for collective rights of land, demanding policy change, guerrilla gardening, community gardening and so much more. We have an ecosystem of place-based experts on all aspects of climate solutions, but most of their knowledge is suppressed.

After uprooting myself from Maine and re-rooting myself in the mountains of Appalachia, my passion for place-based expertise in climate solutions has grown stronger. I have worked at multiple family homesteads throughout the past few years, and am extremely grateful to most recently be working with those families and other locals on place-based education within current agroecology curriculum. Agriculture is rooted in southern Appalachian culture, and

vice-versa. As an entire region that has a history of collective, sustainable, land management, Southern Appalachia is unique (Lutts 2004). Community members hold immense knowledge that we desperately need for a just transition to a regenerative society.

What I have learned from the locals in town, are the ways in which land is not solely ecological and scientific. Land co-creates culture. All biota and abiota are inherently tied to cultural practices and the ways society functions as a whole. We have transitioned to believe science is its own subject, but scientific knowledge production is rooted in culture, in historical tradition, in relationships and intergenerational experience. Southern Appalachia's agricultural history is impossible to learn about without delving into local cultural practices, beliefs and ways of being. Knowledge of every agricultural practice; be it seed saving, forest management, or livestock integration, has been produced in practice, collectively over generations of Appalachians.

Many Southern Appalachian locals are true experts on sustainable forest management, and they have been for hundreds of years. I have spent hours talking to the last dairy farmer in the county, who I have worked for since freshman year. The way he was taught about sustainable agriculture growing up was embedded in his relationships with all plants, animals and people in his life. Southern Appalachia's history contains lived experience of solutions we very much need. Most places do.

We are in desperate need for diverse epistemologies at the forefront of climate knowledge as well as solutions. We need diverse ways of learning, knowing, teaching and connecting, to broaden the climate movement even more. We must learn both of and from the history of racially biased science in Western education. As the entire Cell Editorial team collectively stated in simple terms, "Science has a racism problem," and this problem is not recent (The Cell 2020).

Rather, I would argue that racism has been rooted in the validation and education of science as a whole subject. Authors Santos, Nunes and Meneses refer to the historical suppression of alternative ways of knowing as “epistemicide,” (Santos et al. 2007, ix). This imperialist history of Western and white supremacy in knowledge and science knowledge specifically, cannot be ignored going forward. Those authors speak to the immense diversity of ways of knowing that exist throughout the world, and call upon any resistance to capitalism to replace the monoculture of scientific knowledge we know, with an ecosystem of knowledges. We have much work to do, many wounds to heal, and so much to learn from people, culture, and ways of life, that are actively undermined by Western education.

I learned about climate change from farmers and community members through storytelling. Without discussions, artwork and stories that localize the effects of climate change close to home and closer to our morals, those who are physically distant from the consequences of climate change will continue to stay internally distant and disconnected as well. That family farm in Maine; they have a story being untold to the community around them about climate change and adaptation. We are in desperate need of diverse ways to communicate ideas and experiences of resilience from frontline communities and people who have been systematically oppressed, as well as others.

By learning from the hidden experts in our most marginalized communities, the experts in our local land and cultural histories, we will continue to develop just alternatives and a just transition to a regenerative society. I am hopeful and inspired as I learn more from those incredible experts.

References

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