How Fieldwork Broadened my Horizons

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I absentmindedly wiped beads of sweat from the back of my neck before glancing up from the dusty sagebrush steppe. Squinting into the clear blue sky I called out “Hey Sherel, I have a question about this plant.” Sherel, the 75 year old botanist and leader of our field crew, shuffled towards me, the noticeable limp when he walked on flat ground hardly apparent as he worked his way across the rugged terrain. “What did you ask?” He said when he got closer, cupping a hand around his good ear to hear better. I pointed at the low, sharply toothed plant with yellow flowers by my feet. “I know you showed us this a few hours ago but I’ve forgotten its name already.”

“Hot dog! Looks like you’ve got a *Mahonia repens*.” Sherel replied excitedly in his thick, rural Utah accent. “Oh yeah! Thanks Sherel. Can you remind me how you know it’s a *Mahonia*?” I said before jotting the name down. Sherel animatedly explained the defining features of the plant and I couldn’t help but smile at the child-like energy with which he described the relatively common species.

That evening as I sat on the front porch watching the sun fade behind the Uinta mountains, I texted my childhood friend “Day 1 was actually kinda fun, but we’ll see how long it is before I get bored from identifying plants in the field all day”.

When I was an undergrad I spent a year and a half working on ecological research, but managed to avoid fieldwork. I had grown up in the woods, but something about fieldwork seemed like pure drudgery – days bent over plants for 8-10 hours were a lot less interesting to me than trying to interpret trends in large datasets. After graduating I suspected I wanted to go to grad school to better study these big picture questions in ecology, but my mother was a proponent of working for a few years to explore my interests before returning to school. So I took a job on the other side of the country, in Utah, to learn whether I needed a graduate degree to engage with science the way I wanted. The position was entirely fieldwork based, with every day spent cataloging vegetation on the Ashley National Forest. I was not particularly excited about the fieldwork, but it felt like a necessary evil to push through before I could move onto bigger, more “intellectual” things.

The weeks in Utah rolled by as the summer got hotter and the air became smoky from fires in Colorado. But the boredom I expected never came. It turned out that rather than monotonously staring at the same plants every day, the field experience was actually the fastest way to learn about this ecosystem. Analyzing datasets and reading papers on the high desert hadn’t prepared me for the intricacies of the region. But by picking Sherel’s brain about pronghorn antelope, aspen groves, and every species of sagebrush, field days were more about learning than just rote identification of plants.

To my surprise, when the summer was over, I didn’t flee the field to join college friends in San Francisco. Instead, I found myself agreeing to another field job in Michigan. In the dense forests of the northern Midwest the weather was worse, the days were longer, and the work much more taxing. But the learning was just as deep. It turns out that counting hundreds of tree seedling every day gives you a strong, working understanding of where individual species grow best.

I’m now a PhD student in forest ecology - in part because these field jobs solidified my interests. In Utah and Michigan I was exposed to a variety of ecological sub-fields, but I kept finding myself drawn to trees. I decided to pursue a graduate program with a strong fieldwork component. By trying to emulate the excitement Sherel felt about plants he’d studied for over 50 years, I enjoy fieldwork now. And I’ve also come to realize its intellectual value. To fully understand the ecosystems that I study, I need to work in them and learn from hands-on experience. Although I still work with large datasets and computer modelling programs, my ability to interpret these relies heavily on on-the-ground knowledge of these ecosystems.

All these insights came from taking a job I feared would be boring – and I am now a better researcher because of it. Take advantage of the opportunities that are new, unknown and potentially dull - they may just surprise you. But even if they do end up boring, you’ll at least gain a broader set of skills and experiences that may come in useful down the road.