This summer I spent eight weeks in China as part of an internship with Hebei Qimei Agricultural Technology, a fast growing and internationally certified organic produce company. I worked with three other Cornell undergraduate students conducting very basic composting and intercropping experiments, taking soil samples and meeting with farmers and company managers to discuss farm management strategies. For the majority of our internship, we lived at the company’s headquarters and processing facility, two hours south of Beijing in Handan City. We also spent a week living in Wu’an County in a rural mountain village, and traveled to Beijing for a short trip before returning to the US.

None of the students in this internship spoke any Mandarin, so learning to navigate the language barrier was a challenge for all of us on the trip. I also hadn’t been outside of North America before going to China, so attempting to wrap my head around the countless differences between China and the United States was a huge part of the learning experience for me, and I was amazed by just how different a place could be. We were very lucky to get to spend time in many different settings within China – from a very rural mountain village, to a small city, to Beijing – and we noticed the culture shifting along with the lifestyle as we moved from rural to urban settings.

It was very difficult to get used to the level of hospitality that is customary in China. The employees at our company were so eager to wait on us that it often felt like a daycare center compared to life in the United States. We learned that the CEO was very worried about us because the police had told her that they knew we were working with her company for the summer, and warned that if anything happened to us it might cause an international conflict. There were times when we felt very restricted by our position in the company, our inability to speak Mandarin, and our status as foreigners. This was difficult to get used to, but the connections that we made with the English-speakers at our company proved very valuable because they were able to understand our desire to explore and do things on our own from time
to time. It was always fun to get out to the farm where we were allowed to do work and interact with farmers, who were very helpful to us in our work and seemed genuinely excited to have us around.

The soils on the farms where we worked were very poor, with little organic matter and poor aggregate stability, as well as intense weed pressure in many of the fields. The main objective of our experiments was to help us illustrate to the company's farmers and managers some general methods for improving soil health, and provide quantitative evidence that these methods would benefit their crops. Working in the fields, we were able to put to use much of the knowledge we'd gained in various Crop and Soil Sciences courses at Cornell. However, the task of translating our projects and various concepts relating to soil health proved incredibly difficult. This proved to be very challenging, because all of our work creating experiments around things like composting and intercropping was meaningless if we could not translate the purpose of these practices.

In addition to the challenges of translating agricultural terms and concepts, it was often very difficult to find any reasonable advice for the farmers, simply because the context of their farming was so drastically different from anything that we were used to. Some of the more obvious limitations that they were experiencing seemed very much out of their control. For example, all of the farms were using flood irrigation, almost all labor was being done by hand, and it was a common practice in the area for farmers to sell off the top two or three meters of their topsoil to be made into bricks. It seemed strange to be advocating for soil health and conservation practices in a place where tons and tons of soil are being removed from farmland to be made into bricks.

While things like the severity of pollution or the soil degradation initially struck me as shocking and sad, I was constantly impressed by the ability of the farmers and people in China to persevere and work with what they had. Even where they had the worst soils I’d ever seen, they continued to grow corn and soybeans, and they made it work. Every vacant lot and roadside patch seemed to be planted with something, and I often got the feeling that the farming practices that Chinese farmers employed entirely out of need would have received great applause
and been labeled as cutting edge “permaculture”, “edible landscaping”, “urban gardening”, etc. if they occurred in the US.

Overall, China gave me amazingly valuable first-hand experiences in understanding how two places can be so different from one another. The level of unpredictability that we experienced in China helped me learn to think on my feet and problem-solve in the real world, and the everyday challenges helped me learn how to get work done when working in foreign countries. I gained an appreciation for the pieces of knowledge I've picked up through my coursework at Cornell, as well as an appreciation for all the things I can't learn in the classroom.