Julia Borland, Northwestern University Project Dates: June to August 2021

Partner: Zumwalt Acres Location: Sheldon, IL, USA

Sustainable Farm Apprenticeship Program: Environmental Justice Education Initiative

Problem: Industrial agriculture releases greenhouse gases and other pollutants, but sustainable farming enhances ecosystems, absorbs atmospheric carbon, and produces more nourishing food. Sustainable farming also has the potential to revitalize rural communities and create fulfilling job opportunities. Zumwalt Acres' mission is to convert a conventional farm into one that is sustainable and eco-friendly, yet we soon realized that American agriculture presented a different but related problem: as climate change diminishes agricultural yields and damages natural resources, BIPOC communities will be disproportionately affected. Zumwalt Acres seeks to address this social injustice. If we learn from indigenous wisdom, listen to those who have advocated for food justice for centuries, and foster collaboration among farmers, activists, policymakers, and scientists, we have the power to create a more fair and resilient food system.

Zumwalt Acres Today: The Zumwalt Acres Sustainable Farm Apprenticeship Program is a live-in summer farm program in Sheldon, IL, that equips the next generation of farmers and environmentalists with hands-on knowledge of sustainable farming. A cohort of ten college-age apprentices from across the country live and work on the farm. Over ten weeks, apprentices gain practical skills in planting and maintaining hundreds of food-bearing trees and shrubs; establishing garden beds for organic vegetables and herbs; and conducting scientific research on sustainable soil management and renewable energy with support from leading researchers at Yale University and the University of Illinois Urbana-Champaign.

Zumwalt Acres Tomorrow: This summer, I propose to expand our sustainable farm apprenticeship program by centering on environmental and food justice. While Zumwalt Acres has funding to house and feed apprentices, we lack funds to expand our program to enrich apprentices' political, social, and cultural knowledge of farming. I intend to use the Projects for Peace award to fund apprentice participation in such workshops as Uprooting Racism in the Food System, by Soul Fire Farm, a leader in environmental justice in US agriculture. Tickets to this particular event are \$75 per attendee. Nonfiction books, including Robin Wall Kimmerer's *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* and Leah Penniman's *Farming While Black*, will also be essential for informing group discussions on combatting discrimination and oppression in agriculture. I have budgeted up to \$1000 to provide books for the apprentices. Finally, at the end of our program, we will invite local Sheldon farmers to Zumwalt Acres to learn more about our transition to an environmentally sustainable and socially just form of agriculture.

Project Objectives

- Introduce apprentices to a variety of sustainable farming practices, including agroforestry, biochar production, natural soil amendments, and organic horticulture
- Learn from local farmers in the region through field trips and on-site mentorship while empowering youth to apply these lessons directly in their responsibilities as managers of Zumwalt Acres
- Provide apprentices the opportunity to conduct field-based research on regenerative agriculture and share results through presentations, publications, and social media
- Encourage apprentices to explore the history of regenerative farming practices and to consider how their cultural traditions inform responsible land stewardship

• Foster a community of new farmers and environmentalists who fight racism, sexism, and other forms of oppression

Activities Timeline

Month	Activity
June 2021	 Workshop/Field Training (W/FT) 1: Sustainable Agriculture Sustainable farm field trip 1
July 2021	 W/FT 2 and 3: Plant Medicine and Uprooting Racism in Food Systems Sustainable farm field trip 2 and 3
August 2021	 W/FT 4 and 5: Grafting and Renewable Energy Sustainable farm field trip 4 Host community event with local Sheldon farmers
Day-to- day	 Maintain trees and shrubs planted in spring, cultivate produce in raised beds Produce biochar using natural waste, including dead tree wood and nutshells Combine biochar, basalt rock dust, manure, and soil for natural soil amendments Blog posts authored by apprentices about their Zumwalt Acres experience Weekly discussions exploring social and political dimensions of regenerative agriculture and how Zumwalt Acres fits in the movement Apply for grants to support/expand existing programs and launch new ones

Student and Community Impact: Our work will affect climate change mitigation and youth education. We will measure our impact through quantitative and qualitative metrics. Quantitative metrics will include the number of workshop hours attended by apprentices and number of attendees at our Sheldon community event; we will also document the carbon captured through sustainable soil management techniques and the extent to which these practices improve crop yields. Qualitative metrics will rely on pre- and post-term surveys that apprentices will complete as well as regular meetings with apprentices to understand areas of success, lessons learned, and areas for improvement. Developing a network of program alumni will also allow us to evaluate and build career paths after Zumwalt Acres.

Project Coordinator: I am a third-year student at Northwestern studying social policy and economics. I am passionate about mission-driven work, especially with an environmental focus. The summer before I co-founded Zumwalt Acres, I interned at Iroquois Valley Farmland REIT and helped build the community presence of a 10,000-tree agroforestry initiative in Peotone, IL, an hour from Sheldon. In September, I moved into the Zumwalt Acres farmhouse, where I lived for three months before moving back to Evanston and working virtually. I am a part of a team that includes Zumwalt Acres' sixth and seventh generation of family farmers. Farmers on the land directly surrounding us are relatives who have been receptive and supportive of our work and are now in the process of implementing sustainable practices with our help, particularly tree planting. Zumwalt Acres fits into my long-term goals of realizing environmentally sustainable and socially responsible agricultural practices in the Midwest and beyond.