

AN ABSTRACT OF THE THESIS OF

Rosa Christophel Michaels for the degree of Master of Arts in Applied Anthropology presented on June 11, 2019.

Title: “Gold Dirt:” An Exploratory Study of Beginner Women Farmers’ Experiences with Farmland Tenure Mediating Care for Soil in Willamette Valley, Oregon.

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This thesis investigates how beginning, women farmers, within in a women farmers’ network in the Willamette Valley, Oregon are accessing land and farming information. Using ethnographic, community-based research methods, I ask how land access mediates their ability to care for their land and soil. Are these farmers interested in fostering “soil health” through methods of care via sustainable farming methods, or through building a long-term relationship with the microbiological-ecology of the soil and does this vary whether they are on leased or owned land? This study also interactions with farmer support institutions, programs, and organizations, both those that exist within the dominant agricultural paradigm and those that came from grassroots beginnings. The findings are examined through a multi-species, logic of care framework and in a discussion of gendered experiences of women as farmers. Part of the basis for this research emanated from an internship in which I worked directly with women farmers’ network coordinators, engaging with this community throughout the research process, creating space for dialogue and feedback upon presenting findings. In-depth interviews were conducted with self-selected informants from the community and those interviews then informed a survey that was sent out to the women farmers’ network. The nuances of their experiences will be highlighted and are as important to understanding the experiences of women farmers as is discussing their obvious differences and similarities.

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“Gold Dirt:” An Exploratory Study of Beginner Women Farmers’ Experiences with Farmland
Tenure Mediating Care for Soil in Willamette Valley, Oregon.

by
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APPROVED:

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I understand that my thesis will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

Rosa Christophel Michaels, Author

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DEDICATION

To my Dear Old Dad, the smartest guy in the whole world, thank you for teaching me how to plant my own seeds and raise my own garden.

Positionality Statement

It matters what matters we use to think other matters with; it matters what stories we tell to tell other stories with; it matters what knots knot knots, what thoughts think thoughts, what descriptions describe descriptions, what ties tie ties. It matters what stories make worlds, what worlds make stories... decisions must take place somehow in the presence of those who will bear their consequences. (Haraway 2016, 12 [furthering Marilyn Strathern]).

Those few lines of the opening pages of Donna Haraway's *Staying with the Trouble: Making Kin in the Chthulucene* summarize the feelings I have regarding Anthropology as a discipline and which have also influenced my research project.

To begin, I must recognize that I am a white, non-disabled, heteronormative woman who was raised in an almost exclusively white, conservative, poor, rural farming area in southeastern Ohio. My home community exists at the intersection of Southern, Appalachian, and Midwestern cultural influences. I am also a mother while conducting this research. These qualities, and the experiences that follow, all matter in how I have and continue to navigate through the academic structure, my research project, and the lives of farming women, in addition to how I traverse through daily life. I recognize that these aspects of my personhood have meant that there are many challenges and fears that I have not had to consider on a daily basis. I know that these aspects also affect how I am perceived by others and how others interact with me; how I exist in and move through spaces.

The majority of the women farmers I have met have also been white and heteronormative. I am noticing that by inviting "all women farmers" to participate, that by not adding parameters to "women farmers," it is possible that I may have unintentionally excluded some women by not specifically stating that this is a space for them also. This "open invite" which I thought was "explicitly open" may be a result of my experiences of navigating the world through white-heteronormative lens, meaning I assumed that "women farmers" means all farmers who identify as women, but perhaps if I was different, I would have recognized that inclusivity statements are in fact necessary.

My upbringing, being generally very different from that of my university peers and co-workers has always made me somewhat of an outsider. I do not believe this is a negative quality, but rather feel it allows me to have a different perspective on life. My background and awareness of it directs my research interests. Most of the women I have met in my research are at least one, or several generations, removed from a farming family member and many have left "city jobs." They attended university prior to becoming land-tenders. Where I differ from many of my research

participants are differences in how we grew up. I was raised on one of the remaining small family farms in rural Ohio and I was a first-generation university student. I relate to these women on this level though because I left my farming community to attend university and, initially turned off to academia, a year after graduating, I returned to farming as a mixed-vegetable-farm-manager-apprentice.

Also, important to how I have conducted research, formed my committee, and who I have built my methodology around is how I was raised. I grew up doing work equal to that of any farmer's son... differences in gender and what was expected of one gender over another was not something that I necessarily was raised with overtly (but the "traditional" patriarchal-gender-roles were something I always ran into). This was not intentional though, but just how things happened to be; my mother brought in off-farm income as a chef/cook for the county's senior center and my father was *the* farmer. So, where my mother worked long hours and often weekends, my Baby Boomer father expected my sister and I to complete farm chores without his supervision or prompting and also perform conventionally gendered work in our Mother's absence. These dual-domestic-responsibilities grew my sense that "anything boys can do I can do" and more, at an early age, and this attitude elicited many challenges and provocations from other boys that only encouraged and reinforced the forming of a future feminist's attitude and worldview.

Also affecting my early feminist worldview were two books I purchased in elementary school: *Great Women in American History* and *Encyclopedia of Women throughout History*. These two books alone gave me the history to back up what I have always felt in my bones, that women are powerful, intelligent, and make change happen—even as I was still being taught that men and boys are "naturally" good at/inclined toward science and math, and are inherently smarter... it has taken me years to flush out these ingrained notions. I also did not know how capable I myself was until I met a few very important and supportive mentors at my undergraduate institution and it wasn't until this university that I realized I was in fact a through-and-through feminist. Hence, my committee being all women, all mothers, and the fact that the majority of the authors and researchers cited in this thesis are women.

It took three universities and four different majors to "find" Anthropology and I had the good fortune of meeting a professor who has become a dear friend and mentor. His formal training as an anthropologist is within cognitive, linguistic, and environmental anthropology, and he is an applied anthropologist. He has greatly influenced how I understand and go about performing anthropological research and to whom I feel research and knowledge production belongs. Because

of his classes, I have always felt research needs to be done *with* a community, meaning not just giving the end results back to the community, but involving those people along every step of the way, while also making sure that the research would benefit the community in a way *they* felt was needed.

Because of this professor, I had several opportunities to do community-based, and participatory-action research with communities near the university. These experiences have shaped presently “why I do anthropology” and for whom.

However, for years prior to graduating I was set upon applying to graduate school immediately, but after going to an “ethnographic field school” in Belize, working with sugar cane farmers, community stakeholders, and their family members, I decided otherwise. I felt uneasy, beyond culture shock, about entering a place and space that was not my own and doing “ethnographic methods” with folks who spoke English as a second, and sometimes third language. Then I was supposed to write up what I had listened to and “learned” as “data,” as if spending an hour or so with several different households could capture the ‘main salient themes’ about their lives. Because of this trip, I decided to hold off on graduate school. Also, this trip and the people I spoke with showed me how alike were these farmers lives and struggles, to those of the small farming community in which I grew up, especially when they are farming for globalized markets. I took this feeling as a “sign;” my father had just passed away the year before this trip, and maybe I was feeling the need to honor him somehow, but I decided I needed to return to the soil.

I found an organic farming apprenticeship, which included one sponsored college course in sustainable agriculture management per semester. Our Harvest Cooperative, the farm where I trained, focuses on food access and social justice in urban food deserts, as well as emphasizing worker rights and fair wages. On a daily basis, my bilingual, American farm manager and I worked with three men who were from Guatemala and knew much more about farming vegetables than any of us. We all discussed differences in farming methods, how farming is seen as man’s work, and their struggles existing in the United States, among many other topics. While I loved farming, I realized I missed Anthropology and the academic environment, although in retrospect I was “doing” Anthropology every day, observing deeply, learning, listening, and recording my experiences in my personal journal.

The farm was constantly under stress and some years it seemed they wouldn’t make it... the biggest factor in this process was that they were leasing two different farms and not yet able to purchase farmland in Ohio. The issues that arise from farming on someone else’s land affect and permeate all other aspects of a start-up farming business. Without a sense of permanence, the farm

cooperative had to constantly ask for permission (and usually wait a long time) to do things to meet basic needs of the business, building what they needed so that it could be moved if the land was sold out from underneath them. Another major issue related to leasing land arose as the farm worked towards organic certification and greater sustainability. Building optimal soil health can take years to achieve, but because renting land is not a secure farming situation, the farmers did what they could to “build soil health” without investing resources in longer-term soil health, mostly due to the fact that they did not plan to ever buy the farm on which they currently ran their business. Soil cannot be moved from the farm, so it would be a loss of time and labor investment.

Growing awareness of leasing issues and murmurs of the effects on small farmers by the approval of the Food Safety Modernization Act (FSMA) were what officially drove me back to graduate school. I thought I would be able to provide documented research of how the Act affected farmers for policy writers, but the Act’s implementation was pushed back and would instead be implemented in stages in a timeline that would not match up with my graduate research project. So I began looking at land-access and land-tenure issues with beginning farmers (much like the issues faced by the farm where I had I worked) and found that not only was there very little written on it, but women farmers were virtually unrecognized even by state and federal entities – this potential research topic felt like home.

I had already decided that I wanted my graduate committee to be women-centered and my methodology to be thick with feminist theorists, so research with women farmers felt like the most connected and “right” research to do, especially working with women farmers in the United States. I return to Haraway and Strathern’s quote at the beginning: “*It matters what matters we use to think other matters with... decisions must take place somehow in the presence of those who will bear their consequences.*” Reading this passage in my first year of my master’s program helped me synthesize my life experiences within farming and academia and inform the why and how of my master’s research.

Because of my research experience in Belize, I have only felt comfortable doing research with people that I feel I can speak with/for in academia through a *real emic* perspective—meaning I have had similar experiences and share worldviews with my research co-creators. The conversations I had in the course of this research occurred without having to pause for explanations of “farming jargon.” Moreover, my insider knowledge and experience allowed me to navigate topics that may not have seemed important to someone without a farming background. Becoming a parent who is in her late twenties, a similar demographic to many of the women farmers I have met, has also allowed me to have conversations that otherwise may have ended up being superficial, had I been someone else.

Working under a farm mentor who showed me that plants, soil, and other beings in general communicate to us if only we (humans) take the time to notice, has become extremely important to my reading of feminist theorists and thinkers. Their words are echoed in my own research and writing. This research is not just out of curiosity for me, rather it is an extension of my embodied experiences as a farmer and an anthropologist.

Chapter 1: Introduction

This thesis investigates how beginning, women farmers in the Willamette Valley, Oregon are accessing land and farming information. Using ethnographic, community-based research methods, I ask how land access mediates their ability to care for their land and soil. Are these farmers interested in fostering “soil health” through methods of care via sustainable farming methods or through building a long-term relationship with the microbiological-ecology of the soil and does this vary whether they are on leased or owned land? This study also addresses their interactions with farmer support institutions, programs, and organizations, both those that exist within the dominant agricultural paradigm and those that came from grassroots beginnings.

The number of women farmers in the United States has been on the rise since the late 1980s (USDA 2012). I met the study participants through a women farmers’ network in western Oregon operated through Oregon State University’s Extension Small Farms program. The community is self-selecting and also functions as a knowledge sharing network. Part of the basis for this research emanated from an internship in which I worked directly with the network coordinators to be able to engage with the community throughout the research process, and to create space for dialogue and feedback upon presenting findings. I conducted in-depth interviews with members of this community and those interviews then informed a survey that was sent out to the women farmers’ network. The nuances of their experiences will be highlighted and are as important to understanding the experiences of women farmers as is discussing their similarities.

This research investigates how beginning, women farmers are accessing land, how land access mediates their ability to care for their land and soil, and how interactions with farmer support institutions, programs, and organizations of the dominant agricultural paradigm and others of grassroots beginnings, shape their experiences as farmers. Similar to other research done with women farmers, this study was undertaken within a women farmers’ network in western Oregon, a self-selecting community, which also functions as a knowledge sharing network. Foundational to this research was the idea of working directly with the network coordinators to engage the community throughout the research process and create space for dialogue and feedback upon presenting findings. This research aims to present a verdant collection of beginner women farmers experiences regarding farmland access and tenure, the care relationships they’ve built with their farmland, and the knowledge networks they access to ‘do farming.’ In this research the word *sustainability* encompasses many farming methods that are concerned with building and maintaining soil fertility

and soil health through a variety of agro-ecological methods. These specific methods include, but are not limited to, biodynamic, certified-organic, organic-practicing, permaculture, holistic management, regenerative, and agro-ecological.

In Chapter Two, I present a background of research done on women claiming the title “farmer” in the United States since the 1980s. Much of this research has focused on shifting gender roles and identities of women farmers and on challenges faced by these women. However, few studies focus on barriers faced by women while trying to do the act of farming and all that it entails. Therefore, this research attempts to describe women, beginning farmer experiences with accessing land, and how this vital element of farming affects their farming practices.

In Chapter Three, I discuss multi-species relationality. I frame the practice of sustainable farming as multi-species, relational, care-work. The women farmers I spoke with are not the only ones farming, rather they employ specific acts of soil care work through animals on their farms and other practices that care for soil, to build what they call soil health. I look at not just how humans care for soil, but how humans in relation with other species on the farm, together, care for soil. This form of “multi-species ethnography” is a mode of inquiry that focuses on the various relations humans make with their environments, the co-creation of humans and environment through these relations, the making of We “companion species,” and how We can be mutually beneficial together and not one dominant above all (Haraway 2008, Kirskey and Helmreich 2010, Tsing 2015). Viewing sustainable agriculture through a lens of multi-species analysis gives me the ability to look at a farm as an entire multi-relational organism that temporarily displaces the human-farmer as the only important agent to conduct the act of farming and soil-care.

In Chapter Four, I discuss the methods I used, taking a grounded approach, I first generally met women farmers at a women farmers’ retreat event and held informal conversations with whoever approached me. Those conversations led to later formal questions and conversations and an end survey. In Chapter Five I introduce you to the key participants from interviews, giving short vignettes of how they came to be farmers and a short synopsis of the stories of land, care, and farming they shared with me. In Chapter Six, I discuss themes that arose from themes that arose from the interviews and were supported in the survey responses. While I have given summaries and discussed their stories, I have kept the context and experiences shared with me during interviews intact and allowed these women to speak for themselves by keeping their minimally edited transcripts in the appendices. The research findings were presented back to the network for feedback from the community, prompting several productive conversations and community

networking. I discuss how these women farmers, through a logic of care practiced through above and below ground networks, are creating other agricultural worlds and possibilities within a hegemonic, patriarchal, agricultural paradigm. In the Conclusion, I describe how this research has prompted the women's farmer network administrators to reflect on the purpose and use of the network. I also address the blind spots of this research project and future research needs, especially regarding intersectionality of women farmers.

Chapter 2: U.S. Farming Women and the Challenges of becoming The Farmer.

Introduction

Outside of the United States, and in general North America, much attention has been paid to the struggle of women, small scale, subsistence farmers and the importance of their ability to access land not only to feed their community but also for practicing environmentally-friendly farming methods (Alkon and Guthman 2017; Federici 2004; Sachs 2018; Sachs and Alston 2010). In the face of climate change and the unforeseen consequences of the Anthropocene, sustainable farmers are needed to hopefully mitigate human-caused environmental damage and are possibly better adapters to regional climate changes for food production and food security. In addition to food security, soil-health is also a global environmental concern. The World Bank, UN, FAO, Rain Forest Alliance, amongst many other development agencies, have recognized that women, half the global population, are the reason that 85% or more of humans eats everyday-this is being mainly through women's efforts in local food subsistence and production practices.

Carolyn Sachs, the residing expert on women farmers within the United States tells us that "Although women do the majority of work in agriculture at the global level, elder men for the most part still own the land, control women's labor, and make agricultural decisions in patriarchal social systems. In most areas of the world, the family remains the primary unit of production in agriculture. And that State policies in the United States, Latin America, and Africa often explicitly support these patriarchal family farms through extension programs, government loans, and marketing policies. It is thus timely to reexamine gender relations when the continual demise of family farms and growth of agro-industries are disrupting traditional patriarchal systems" (Sachs 1996, 6).

Kerssen and Brent show us that food security and food justice lie within permanent access to land, or land justice. "Three decades of neoliberal globalization have driven massive agrarian transition around the globe. The livelihoods of smallholders, farmworkers, fisher people, communities of color, and Indigenous peoples have been severely eroded by market forces. And that a global wave of dispossession and land concentration has shifted agricultural land use toward extractive industries of feed and fuel crops, thereby concentrating land ownership and dramatically reconfiguring landscapes in the Global North and South." and that... "Understanding the importance of land as the foundation of both capitalism and its alternatives is critical for building a stronger movement and advancing meaningful transformation of the food system" (2017, 284-285).

Women around the world have been the ones to lead fights in land access and food justice. Specifically, “women farmers across the globe are seen as key to sustainable agricultural development” (World Bank 2017, Rainforest Alliance 2018). Women farmers, sustainable agriculture, and land tenure outside of the United States have been written about prolifically, especially in development contexts. But there has not been as much of a focus on women farmers in the United States even though women are the fastest growing farmer demographic since the 1980s.

Until recent decades, United States agriculture was and still is mostly a male-dominated, large-scale, techno-scientific based production business, where over time, the idea of locally feeding one’s community transformed into feeding the globe (Sachs 2018). However, agriculture in the United States is shifting as many women are responding to increased fears of climate change and other agriculturally related environmental concerns, rising poverty rates, issues regarding access to fresh food, and the quality and safety of food being produced.

Popular media and recent studies suggest that women in the United States have broken the “grass ceiling” of patriarchal agriculture and in doing so have reoriented their identity as “The Farmer,” instead of just a farmer’s wife or daughter (Ball 2014; Beach 2013; Braiser et al 2014; Carter 2017; Doering 2013; Kivirist 2016; Rosenfeld 1985; Sachs 2018). Over the last 40 years, this reorientation of identity has not come easy, and women farmers still face many barriers of entry to farming, especially access to the institutional support needed to continue farming, as well as support that fits within their farming praxis paradigms (Sachs et al 2016). Yet their persistence and existence have major implications for the patriarchal agricultural system, supporting institutions, and agri-business economy that continues to dominate in the United States.

This diverse range of women have left previously established careers, or never started one, while being inundated with student debt, to become small scale farmers, intent on nourishing their communities, families, and caring for the land and soil they farm (Jarosz 2011, Lusher-Shute 2017). Contrasted with the mega-scale, machinery oriented, mono-crop agriculture consistent with patriarchal agriculture, these women are small scale, diversified producers, most notably interested in farming through “sustainable practices,” which involves laborious hand-work to build and maintain soil health (Sachs et al 2016; Trauger 2004). If women farmers are to be successful in caring for their communities and land, then it is necessary to not just understand motivations to become farmers and to use certain farming methods, but to understand their experiences within the existing

dominant agricultural paradigm so that the support systems within it can be adjusted to better serve and support women farmers and their preferred farming praxes.

Background

Farm Women in U.S. Agriculture

Prior to the onset of industrial agriculture and agribusiness, farm women invisibly conducted a significant amount of the day to day farm labor, in addition to domestic and reproductive labor (Rosenfeld 1985, Sachs 1996). Only during World War I & II were women given notoriety for their exceptionalism in working the farm and feeding the nation, yet still not earning the title farmer, rather called farmerettes, these government backed farm take overs were soon forgotten once men returned from the war and re-entered the workforce (Gowdy-Wygant 2013). As post-war technoscience backed agribusiness grew, and many small family farms were lost to large thousand-acre-scale operations, farm labor subsequently became less convivial and more divorced from handling the actual soil. Labor previously conducted by hand, with the assistance of farm-animals on small farms, became mechanized and tractor based, and women's farm work in particular became further confined to invisible household domestic duties, creating an even more intense form of patriarchal agriculture and division of labor (Bellacasa 2015; Rosenfeld 1985; Sachs 1996, Sachs 2018; O'Brien 2013).

Women Farmers Rising

Farm women have always existed in the United States, but not until post-back-to-the-land-movement of the 1960s and 1970s and the parallel rise of ecologically minded farming practices counter to conventional agricultural methods, did they begin to become legible (Guthman 2004; Sachs 1996). The 1978 USDA Census of Agriculture was the first-time farm women were formally counted as farmers in the United States, numbering 104,134, constituting 5% of primary farm operators, "primary operator" being the person in charge of day-to-day operations (USDA 1981). That number in 2007, showing 306,209 female primary operators, dropped to 288,264 in the 2012 census, and has since greatly increased to 766,474 as of 2017 (USDA 2007, 2012, 2017). AS of 2017 in Oregon, the number of women farm producers is 29,868 with 20,752 farms with female primary

operators. One of the highlights from the 2017 USDA census included “Thirty-six percent of all producers are female and 56 percent of all farms have at least one female decision maker. Farms with female producers making decisions tend to be smaller than average in both acres and value of production” (White and King 2019). These women are generally new, first generation farmers who are interested in farming through environmentally healing, conservation, and sustainable practices (Allen and Sachs 2007; Trauger 2004; NYFC 2017).

Since that first gendered census, the research on women farmers has focused on shifting gender identities and how women farmers are shedding the ‘farmer’s wife or farmers’ daughter identity’ and claiming the title farmer, yet these women are simultaneously checking the USDA’s “primary operator” box while still navigating the domestic duties traditionally done by farming women (Ball 2014; Beach 2013; Braiser et al 2014; Carter 2017; Keller 2014; Rosenfeld 1985; Sachs 1996; Trauger 2004). Recent researchers have also asked why women are motivated to leave established careers and become first generation agriculturalists and how women are generally doing so in opposition to the agri-business, industrial agriculture model, purposefully forgoing lucrative careers out of care for community and the land—“nourishing the self...and other peoples and places” (Blum 2012; Jarosz 2011; Keller 2014; Larmer 2016). Beginner women farmers are finding “spaces of empowerment” within sustainable agriculture communities and small scale, niche, value-added agriculture production (Trauger 2004; Wright and Annes 2016). Johnson and Schnakenberg argued that women farmers involved in sustainable agriculture in particular embody not just the “watered down discourse of sustainability,” but those expanded socio-economic and ecological goals of ‘civic agriculture’ which “seeks to re-embed food systems within communities” (Johnson and Schnakenberg 2017).

Challenges Faced by Beginning Women Farmers

The National Young Farmers Coalition surveyed “past, current, and aspiring farmers under 40 years old across the U.S.,” of which “60% of respondents identified as women... and 75% of farmers described their practices as sustainable.” This survey showed that “secure land tenure is a fundamental component of a viable farm business,” and that “land access is the top challenge cited by current farmers, aspiring farmers, and those who have stopped farming” (NYFC 2017:8). Compounding to the already present land-access issues, in the early 2000s, several class-action lawsuits were filed against the USDA’s farm loan-service arm, Farm Service Agency, where minority

farmers successfully showed illegal discrimination for loan-servicing and approval; these groups included elderly and women farmers, African-American, Hispanic, and Native American farmers (USDA 2008).

As Carter states in her 2017 article describing women farmland owners in Iowa, “women are underrepresented as participants in research studying farmland ownership” (Carter 2017; citing Druschke and Secchi 2014; Eells and Soulis 2013; Petrzela and Marquart-Pyatt 2011). In their research regarding strategies women use to access farmland, Pilegram and Amos made the important argument that farmland access by women in sustainable agriculture has been largely tied to men and has much to do with the intersections of race, class, increased education and economic opportunities that have mostly served white women since the 1970s. Also worth noting from their research

[W]omen’s increased participation in farming is not uniform and does not necessarily lead to gender equity in farming; more participants does not mean an equitable division of labor or equitable access to farm lands...and that understanding the complex histories and differences among women in sustainable agriculture, then, can lead to a more complete vision of how to create equity within the multifaceted and at times contradictory landscape of sustainable farming and farming in general. (Pilegram and Amos 2015: 20, 21).

Beginner farmers face many barriers in not just accessing capital to purchase land, but also the fact that there is not much farm land to be accessed. The USDA’s Economic Research Service states “Of the 91 million acres of land in farms...31% is owned by entities who are not involved in farming and who rent the land to other farm operators...in 2015-2019, only 2% of land in farms is expected to be sold...suggesting that the supply of land available for purchase may not vary much overtime” (Bigelow and Hubbs 2016). Many beginner farmers are therefore forced into renting farmland, 39% of all farmland is rented or leased and 80% of all rented farmland is owned by non-farming landlords ((Bigelow and Hubbs 2016).

The difficulties of effectively implementing farming practices that center resource conservation and sustainable farming methods, as a farmer on rented and leased land without the authority of final say over the land, has been documented in several places (Carolan 2005; Carolan, Bell, and Mayerfield 2004; Ranjan et al 2019). Furthermore, these studies looked at the “alienation...and inequitable power relations” women non-operating landowners have with their land and male-farm-land tenants, and not having the agency in implanting conservation methods on their farmland (Carolan 2005; Carolan, Bell, and Mayerfield 2004). Recent research has shown that institutional agriculture programs are undeserving underserved farming populations, showing that these groups are unaccounted for and mostly invisible within these same agencies’ data collection

and outreach efforts, despite these institutions explicit mission statements to serve those farmers (Petrzelka, Sorensen, and Filipak 2018). Further, institutional support generally provided by Natural Resources Conservation Districts are failing to even recognize, let alone empower, women non-operating landlords, women operating farm-land owners, and women farmland renters as targets of farmland conservation. When women are connecting with these institutional conservation programs, the methods often do not fit within these women's desired praxis paradigms, and even more disempowering, these women have felt their voices and expressed desires for their land ignored by the program's agents (Eells 2010; Eells and Soulis 2013; Petrzelka, Sorensen, and Filipak 2018; Wells and Eells 2011).

However, even though the dominant agricultural paradigm and those programs that fall within it have thus failed many women farmers, this has not stopped them from learning and practicing conservation and sustainable farming practices. Instead of relying on, or succumbing to, existing structures, women have reacted by forming their own knowledge networks within their communities in the form of organized women farmers networks which "provide critical networks that support and reinforce the use of conservation practices," especially within those organizations that are specifically sustainable and organic agriculture focused (Barbecheck et al 2012, Sachs et al 2016). Scholars of women farmers existing on the east coast have documented the critical importance of women farmer's networks in the success of beginner women farmers in all aspects of farming; knowledge sharing, community building, innovating ways for accessing capital, land, and labor resources, help with navigating existing institutions and structures (Sachs et al 2016). Important to note here, very little research on women farmers of color in the United States in general has been done, and as Sachs et al. (2016) notes in their seminal work "The Rise of Women Farmers and Sustainable Agriculture," even though women farmers over several ethnicities existed in her geographic area, the majority of her population were white women farmers even though farmers of color existed in her research areas.

Research Population and Site

Outside of the eastern seaboard, recent research specifically with women farmers has focused in various specific localities, mostly in the Midwest (Ball 2014; Beach 2013; Blum 2012; Carter 2017; Johnson and Schnakenberg 2017; Keller 2014; Larmer 2016; Trauger 2004; Weber 2007; Wright and Annes 2016). No studies have looked at Oregon's various women farmer

networks, despite being an agriculture production heavy state, but two studies have looked at women farmers in Washington (Jarosz 2011) and the Pacific Northwest (Pilegram and Amos 2015).

Chapter 3: Multi-Species Relationality: Farmers are soil and Soil are farmers.

Since the end of World War II, Western techno-scientific agribusiness farming has relied on human-produced petro-chemicals to grow crops and has viewed soil as a life-less material to be sterilized of all life forms other than the chosen crop, soil being only a means to prop the plant up, while farmers and scientists determine and measure the needs of the plant-crop to force growth and reach the human-desired yield quantities (Fitzgerald, 2010). However, the kind of sustainable agriculture these sustainable agriculturalists are practicing requires creating a deep, longitudinal relationship with soil microbiology to create long-lasting soil fertility. Building substantial soil health takes a lot of time, through every day and seasonal practices, in general, soil scientists assert that it takes about 100 years to create even 1 inch of fertile top-soil.

Michael Carolan argues that the tension between understanding techno-scientific agriculture's detriments and sustainable agriculture's benefits are based in how the visible and non-visible of soil unfolds and how farmers "see" these things. He argues that making visible various beneficial soil processes of sustainable agriculture are a major part of succeeding in the adoption of sustainable agriculture even though its perceived high cost in-puts and low yields are a push-away from adoption, and that this process requires a reorientation of embedded socio-institutional relationships (i.e. with science and technology) especially when the tangible aspects of agribusiness are apparent to the naked eye; namely pest-free and weed-free fields, high yielding crops and profits, but the negative impacts on the environment by conventional practices are less visible. He shows that sustainable agriculture knowledge is a far more "embodied and embedded practice" that is shared through personal relationships and places and is not grounded in commodity productivism as such of the disembodied, dis-embedded, technological based practices of conventional agriculture (Carolan 2009). Roesch-McNally, Arbuckle, and Tyndall 2018) findings support Carolan's research, that reorienting the understanding of conservation practices with soil, into the paradigm of conventional agriculture, could promote adoption of conservation techniques normally viewed as a trade-off between production and conservation.

Callion, Cullman, Verschuuren and Sterling (2017) argue that human and ecological well-being are inseparable and both must be included in conservation efforts, and to do so means to move past the Western ontology based in a human-nature divide. This would entail including biocultural indicators—reframing conservation projects to understanding "people are a part of nature, where people and nature continuously interact and produce one another" (Callion et al

2017). Anne Therese O'Brien brings together various scholars on relationality, agriculture, and multi-species ethnography to argue for relating to, specifically, soil fungi differently in order to reverse soil degradation and climate change. She argues for bridging embodied knowledges of agro-ecological farming with techno-science to see (through microscope power) the “unseen work of soil microbiology” to expand and “broaden imaginations” past the human-centric relationalities of what constitutes life on Earth. She puts into conversation various scholars of “convivial assemblages and technologies” for working with soil; changing the technologies used to work with soil from large scale tractors to small scale, sustainable, hand tools in order to change our relationship with soil to one that is more responsive to the needs of soil by direct contact with the life of soil (O'Brien 2013). This relationship of humans with soil life and the other species is what Marilyn Strathern and Donna Haraway describe as “being-with” or a “...kind of relationship in which each attends to the other to the benefit of the whole” (Latimer 2013).

In recent years, soil science and conservation efforts (coming out of techno-science) have taken an ecological focus that Science and Technology Studies scholar Maria Puig de la Bellacasa (echoing Carolan) has critiqued and argued as “immovable from a productionistic, capitalistic model” of soil use and has subsequently rendered invisible other forms of soil-care models. She states that “modes of soil care and soil ontologies are entangled: what soil is thought to be affects the ways in which we care for it and vice versa.” She calls for “inheritors of the agricultural revolution” to slow down to soil's temporality, “thinking from the maintenance of a web of relations involved in...ecosystems rather than only from their possible benefits to humans...” This is inherently at odds with the current productionistic, techno-scientific temporality that is omnipresent of agribusiness models, which solely seeks to maximize the efficiency of soil, no matter their lip service to soil conservation. It is evident from previous research on women farmers, and what this research intends to further, that new, women farmers, in the United States—the rising “inheritors of the agricultural revolution”—are in-relation with soil life. They are entangled with other species above soil as well, maintaining reciprocal ecosystems rather than extraction based, one-way production relationships with farm-soil. Here I take up Bellacasa's interest in:

...moves that see soil as a multispecies world because these could affect not only the nature of soil itself but also the ways humans maintain, repair and foster soil's liveliness--- that is, the agencies involved in a politics of care...A care approach would look not only at how soils and other resources produce output or provide services to humans; it would look also at how humans are providing for the soil community in order to maintain, continue and repair this living web (Bellacasa 2015: 702-703).

This care-work Bellacasa is referring to is based within Annemarie Mol's 'Logic of Care.' Mol argues that to understand what "good care" means is to be immersed in the everyday practices of care-work, and "care is best understood as shared work, involving not only professionals [farmers], but also patients [soil, animals, plants...the care-es], their families and other human beings as well as bodies, technologies, and all sorts of material elements" [such as convivial farming technologies and soil tests] and "care as shared work between different human and non-human actors" based in everyday practices (Mol 2008, Pichelstorfer 2012:2). This logic of care overlaid onto the farm means looking at how farmers care for soil through everyday practices with technologies, such as soil tests and small tillers and broad forks, their livestock and/or plants on the farm. They are allowing the soil to replenish itself at its own rate, rather than the farmer prescribing and implementing soil "medicine" as is the case with conventional agricultural practices through precision fertilizers and other human created farming chemicals.

The ability to create these multi-species-care-relationships depend entirely upon what Bellacasa referred to as slowing down to "soil's temporality," or the pace at which the life within soil is able to replenish the nutrient availability within it. This temporality hinges upon having long-term continuous access to farm land. So, it is fair to say that this soil-care-relationship is mediated by land access and land tenure. Socio-political-economic structures outside soil-structure mediates the multi-species-care-relationships beginner farmers interested in agro-ecological farming are able to create with soil. Heather Paxson (2012) puts forth a similar argument regarding cheese production by small artisan farmers who use naturally occurring microbial life to ferment cheese, yet cheese production is mediated by mandated anti-microbial, sanitation regulations for food production. Giving a spin on Michel Foucault's "biopolitics," how the state has extended its influence to the biology of humanity through techno-scientific based 'best practices,' laws and regulations as a form of control, Paxson furthers the concept to microbiological life, deeming it micro-biopolitics. She describes how the hyper-sanitization of cheese production facilities, which are mandated by state regulations, is in opposition to the very acts of cheese making, which require a cultured relationship with microbial life and ecology to make cheese ferment. This notion of micro-biopolitics could be extended to the microbial life and ecology within soil, and how sustainable farmer's interaction with this life of soil is potentially mediated by land-tenure and land access, but also how these farmers are acting against hegemonic, biopolitical conceptions of soil-extraction by practicing soil-care-work.

I look at not just how humans care for soil, but how humans in relation with other species on the farm, together care for soil. This form of "multi-species ethnography" is a mode of inquiry

that focuses on the various relations humans make with their environments and how these relations co-create humans and environment, making We “companion species,” and how We can be mutually beneficial and are better together rather than as one dominate above all (Haraway 2008, Kirskey and Helmreich 2010, Tsing 2015). Viewing sustainable agriculture through a lens of multi-species analysis gives me the ability to look at a farm as an entire multi-relational organism that temporarily displaces the human-farmer as the only important agent to conduct the act of farming and soil-care.

This care work through agriculture is in opposition to the production-focused, hegemony of capitalism-based agriculture. Jarosz (2011, 308) argued that small scale, sustainable, women farmers operating under an ethics of care fits within “*the development of what Gibson-Graham distinguish as a post-capitalist politics...emphasiz[ing] the care and nurturing of people and the environment as part of an ethical positioning that challenges the processes of privatization, unfettered capital accumulation, competition and discourses of personal responsibility for inequality and poverty, which construct individuals as neoliberal subjects*” (Jarosz 2011, citing Davies 2000). I support this claim looking at how these women farmers are acting outside of the expected modes of capitalist based productionism on their farms through being mainly occupied about caring for the soil, out of concern for their families, community, and the Earth. Whether they are conscious of it or not, these women are pushing against hegemonic economic structures, which have been dedicated to extractive resource use, through building fertility by practicing multi-species care to replenish an actually valueless natural resources- soil.

Chapter 4: Methods

Research Site and Sampling

In Oregon especially, the relation between whiteness and farming is not something that can be ignored. Being successful in farming hinges upon long-term land access and other scholars have noticed the connection between class, race, and education affecting the ability to begin farming (Pilegram and Amos 2016, Jarosz 2011). So, to even begin discussing land access in Oregon, we must first acknowledge from whom the land of “Oregon” was first stolen and who else was excluded from this place. The Alsea, Cayuse, Chetco, Chinook, Clatskine, Coos, Galice, and Applegate, Kalapuya, Klamath and Modoc, Molalla, Multnomah, Nez Perce, Paiute, Shasta, Shoshone, Siletz, Siuslaw, Takelma, Tillamook, Tolowa, Tututni and Coquille, Umatilla, Umpque, Walla Walla, and Wasco and Wishram tribes first inhabited Oregon before being stolen by the United States through various treaties and they were forcibly removed and relocated to reservations (Orrin and Laura 2015). The geographic border of my research is the Willamette Valley of Oregon, which was/is inhabited by many indigenous peoples, with the mid Valley inhabited by the Kalapuya people. Also, important to note is that Oregon’s land access post-initial-white-settlerism was explicitly racist: “fear of inciting Native American uprising,” Oregon passed several exclusion laws outlawing freed black slaves and mulattos from owning land in Oregon. These laws were not repealed until 1926 (Nokes, 2018). Even today, white supremacy is still publicly espoused in pockets of Oregon.

My introduction into the Oregon Small Farms community, and eventually the women farmers’ network, was through one of the directors of Oregon State University’s Small Farms extension outreach. I had originally met with ‘Meredith’(*all names are pseudonyms) for a class project to ask about her experiences with women beginning farmers and ranchers and land access. This meeting developed into an internship. My observations and participation during this internship also inform this research. That meeting ended with her asking me to attend and take notes for a focus group she would be facilitating in a few weeks with the Beginning Farmers and Ranchers Development Program (BFRDP) working group. The BFRDP working group consisted of leaders of programs and organizations from around Oregon whose aims are to support beginning farmers and ranchers from the time people are just thinking about becoming a farmer, or “pre-farmer” in their words, to the 10 year point in their farming timeline.

This timeline of 0-10 years is demarcated by the USDA definition of beginning farmer and ranchers, set forth for the first time in the Food, Conservation, and Energy Act of 2008. This act was part of the 2008 Farm Bill “appropriated \$75 million for FY 2009 to FY 2012 to develop and offer education, training, outreach and mentoring programs to enhance the sustainability of the next generation of farmers” (ERS 2018). The increasing average age of farmers across the United States is cited as the main reason for focusing attention on assisting a new, younger crop of farmers to find their way into farming and continued support in the early years of farming. The 2014 Farm Bill appropriated an additional \$20 million towards beginning farmers and ranchers and also created the Beginning Farmer and Rancher Development Program (BFRDP). The stated purpose of the BFRDP is to “fund training, education, outreach, and technical assistance to beginning farmers and ranchers, with priority given to partnerships and collaborations by or including non-governmental and community based organizations” (ERS 2018).

The focus-working-group I was asked to attend, was a loose coalition of federal and state financial services, university extension programs, agricultural college programs, grass-roots, community-based organizations, and on-farm-based incubators and apprenticeships, and organizations that specifically supported minority farmers throughout Oregon. In the session that I attended, the topic of discussion was “whose voices are we missing?” This was an interesting question, considering the organizations that were there, several focused specifically on supporting minority farmer populations, four organizations facilitated English-Spanish bilingual programs, or Spanish only, and one targeted immigrant, refugee, and people-of-color farmer-training programs. However, the demographics of the group were overwhelmingly white; two Latinx women were in attendance, and the farm that worked with persons of color was conferencing-in over the phone. These demographics are something I saw repeated over the course of my participation in the BFRDP working group and eventually in the women farmer’s network I was connected with.

Through my internship with the Oregon State University Extension and the BFRDP working group, I connected with the facilitator of a women farmer’s network and an online listserv with an adjacent social media page which functioned to create as a social group for women farmers to ask one another for advice and to build community through local gatherings. This particular women farmer’s network serves the Willamette Valley region. There are several networks within the Valley, but the one I worked with is a general one, with no specific geography attached to it other than the “Willamette Valley.” The network participants are a self-selecting group of women who personally add their names, addresses, emails and phone numbers to the listserv that is housed on

the OSU Small Farms webpage. The women can also add themselves to the adjacent social media page “group” for the network. The network does not actively recruit members but serves as a social-network and community building access point. The facilitator of this network puts out “content” via the listserv and social media group regularly informing the members about farm-related programs and workshops available in the region and throughout Oregon. Every few months, the facilitator does take an active role in organizing social-farmer-potlucks at a network member’s farm or other location and also coordinates other events at the request of the network. One of these events was my first experience making contact with this community. I was invited to attend a women farmers’ retreat at the end of September, the focus of the retreat being “self-care.”

Over the two days of the retreat, I networked with women and recruited a handful of participants for future interviews. I was asked to announce my research project and formally invite women to participate if they would like. I held conversations with women farmers at various stages in their farming experiences and life in general. These women ranged in age from early twenties to late sixties. Some were single and had been farming for years, others were new-mothers having just left life-long careers to start farming as a family, in addition to their partners working off farm. All the participants at this retreat were white-women, except for one woman of color who was there with her wife and their new baby.

After the retreat, I also recruited through a recruitment flier via the women farmer’s network listserv, as well as posting the flier to the social media page for the network. Eventually five self-selecting women contacted me and I conducted interviews with them, on and off their farms. (Bernard, 2006:151). Originally, I was aiming to speak with beginning women farmers who were only renting land, and who were “young” in age. Even though I initially intended to access only non-land-owning farm women, as suggested by Meredith, the Small Farms director, I included land-owning women in my research as a comparison with the land-renters’ experiences because capturing how women are “successfully” coming to own farmland is also important to beginner women farmers over-all story and because I had more land-owners than non-land-owners wanting to be included in this research.

Semi-Structured Interviews and Observations

Women farmers in Anthropology are an under-studied population within the United States, so to conduct semi-structured interviews as the initial exploratory and informative data collection method served the purpose of providing an in-depth, open-ended look at experiences which may reveal salient terminology and topics deemed important by the participants for further questioning (Bernard 2006:157-160). Interviews took place wherever the interviewees felt most comfortable. I intended for most interviews to happen on-farm and to conduct my research during the summer, which is the busy season for farmers, so that I could observe methods of soil care. However, this research was conducted during the late fall and early winter months, the downtime period for most small farmers.

This research project should be considered an exploratory case study of a women farmers' network in the Willamette Valley of Oregon. The majority of this research took place during the winter, non-actively farming months. This seasonal positionality affected my ability to observe farmers in action with soil in day to day 'normal' farm operations, but conversely allowed me to view their passive-care of soil through over-wintering care techniques that came up in the interviews. Five total interviews were conducted with women farmers in the Willamette Valley. Three of these women were land owners, two of the women were land renters and both renters were in transition out of their land-lease situations and therefore our interviews took place off-farm. However, I visited two full-time farmers who were also land owners and observed at their farms.

Interviews were audio-recorded with the interviewees' permission. Names were not collected during the recording of the interview to conform to IRB standards of subjects' protection and privacy and I have given all persons mentioned in this research pseudonyms. There are no "real" names used in this research. I took notes while interviewing and recorded field notes during farm-walkabouts and observations and directly after the interviews. Interview questions were semi-structured to allow the interviewee to determine the direction of the interview and discuss what was most important to them, while keeping within the scope of this research. The interviews began with and revolved around the following broad questions;

- 1) how did you become a farmer?
- 2) what is it like farming on leased land, or how did you buy your farm land?
- 3) how has farming on leased land or owned land facilitated or inhibited your preferred farming methods?

4) how do you care for/work with the soil on the land?

5) do you feel you have a relationship with the soil on the land, if so how and why?

I collected minimal demographic and situational data from the farmers: age, ethnic identity, years farming, size of operation in terms of acreage under production, number of animals, and seasons of operation because much of this information naturally came up over the course of the interviews. I conducted a total of five interviews, essentially a case study of a women farmer's network.

These interviews informed the creation of a survey which was then responded to by twelve more women from the network. In writing up the results of these interviews and the surveys, I follow an indigenous methodological framework that keeps the context of shared experiences intact through minimally edited, thick transcription data, using storytelling as the main way to convey knowledge and experiences (Wilson 2009).

Interview and Observation Analysis and Survey Formation:

Field notes and interviews were transcribed and coded with Nvivo. All names, except my own, have been changed and a coded key was kept to identify interviewees. The transcriptions were coded using a grounded theory approach: "identifying potential analytic categories or themes" regarding land access, practices of caring for the soil and soil-health were the main framework for the coding process with an open-mind toward other undetermined nominal variables that emerged (Bernard, 2006:492). Emergent themes from the interviews included preferred farming methods, social & knowledge networks, farmer support program usage, farm research methods, education level, motherhood, 2008 financial crises, career prior to farming, off-farm income, motivations to start farming, and finally, gender and farming experience. These themes were then turned into open-ended and ranked questions on the survey platform Qualtrics and were sent out to over 200 women via the women farmer's network listserv and posted to the social media group page.

Survey

The survey included demographic data collection regarding, age, educational background, gender and identity, number of years farming, and if the women had children. I collected information regarding type of farmer, as in whether they self-identified as an apprentice, family farmer, employee, self-employed, etc. There were yes or no questions asking about savings and off farm income in relation to starting and continuing to farm, and a list of preferred farming methods collected from interviews and observations, with the ability to answer and describe an “other” option. There were open-ended answer questions regarding how/if land tenure has detracted from or enhanced farming methods, as well as how and why they care for soil health. I included ranked-order-questions regarding motivations to start farming and asked participants to rank farming related sources of information and advice they prefer to go to first, with an “other” category available with an explanation box attached. I asked why they preferred to go to those selections before others. Finally, the survey asked participants to identify which formal agencies and programs they had used regarding their farming enterprise and what their best and worst experiences were with those resources. The final question asked if they had ever felt discriminated against while contacting those agencies or programs and to describe their experiences. The survey ended with an open-ended opportunity which asked “is there anything else you would want to say regarding your experience as a farmer” to allow the survey respondents to comment any final thoughts or anything the survey did not address which they felt important, and to give a final space if there were any concerns.

Member Checking: Assumptions and Biases Revealed

Finally, two member and community checking “events” (farmer-pot-lucks of course) were organized and facilitated by two women farmers and extension agents in the counties I worked within as a way to create conversation about this research and its “findings.” This space for dialogue post-data collection is important to the overall research design and methodology, I intended this project to be as community based and informed as could be facilitated. The taking the results of the survey and the themes back to the community I asked the audience to raise questions and give comments throughout the “presentation” and I prompted three main questions at the end: 1) do you feel represented? 2) does anything feel wrong/what feels right? 3) should this research be used for anything within the community?

The subsequent conversations mostly revealed my biases and assumptions in the research design. First, I had been perplexed as to why the age of the women responding to the survey and my interviewees were all “older,” (above 35). Knowing that the women farmers network had over 200 members, and that I had met “young” women farmers at the retreat as well, I realized I had assumed that beginner women farmers were “young” and that young women farmers would be at a place in their farming careers and would be able to rent or informally lease land. As one young woman at an event mentioned “many of the women I know that are younger are still going through apprenticeships and internships or are graduating from these programs and working as employees/laborers on other peoples’ farms.” Secondly, after going through the survey design and questions, another woman asked, did I ask in the survey or interviews what part of the farm was most important to the farmers? This being in response to the interview and survey question “How do you care for soil?” I realized that my assumption had been that building soil health was the most important factor on a small scale, sustainable farm, and that bias came from my own experiences farming, as well as from listening to all the well-known names in specific farming methods; for example, holistic management, permaculture, regenerative agriculture, etc. Finally, another woman noted that I did not speak with any women farmers doing conventional agriculture. “Conventional” farmers were not part of my original research design, but in future studies regarding women farmers and land access, all “types” of women farmers who are accessing and trying to access land should be included to gain a holistic picture of their experiences within the larger agriculture-paradigm of the United States.

Chapter 5. Findings: Women Farmers Narrate their Experiences.

This research, and the subsequent research relationships that formed, began at a women farmers' "self-care" retreat I was invited to in mid-September 2018. The women farmer's network facilitator, Megan, I had been previously connected with, had extended an invitation as a way for me to start to make connections with women farmers and to put "feelers out there" for my research. The theme of the weekend retreat had originated from the expressed desires of women network through social media and in person conversation, regarding mainly that women farmers did not have enough time for self-care.

The retreat was held at an old 4-H campground in a rural, western area of Oregon. Upon arriving, the most striking feature was the extreme-A frame cabin and the immensity of the trees. Women were setting up their tents in one of the many flat, grassy areas underneath the trees, toting sleeping bags and pillows from their cars. My one year old daughter was with me for the weekend, luckily Megan's almost two year old daughter was also there. I quickly learned we were not the only mothers, a women-farmer-couple had brought their newborn little one with them that weekend as well. The main events of the weekend took place in the large log cabin, retro-fitted with a commissary kitchen, heated by fire place only, with large wood slabbed tables. That evening of the retreat was a "farmers' potluck," all the attendees were asked to bring two food items to share, one meal based and one dessert. The food ranged from intricately decorated fruit and vegetable salads, to laboriously made special vegan desserts. It was apparent a lot of care and thoughtfulness had gone into these home-made and grown foods. The tables were decorated in arranged bouquets of flowers from a few women farms as well. Later that evening there was a vote to decide who brought the best dessert for bragging rights. Almost all the food for the rest of the event was supplied from donations from these women's farms, whether it was cheese, meat, vegetables, honey, or fruits—every bit of food we ingested that week was grown by an Oregon woman farmer. Megan had remarked that evening "I LOVE farmer potlucks. You never know what you are going to get and there is always variety."

There was not a formal agenda of events that evening, but after dinner and desserts, we moved the old, dense wooden-slab tables from the middle of the room. We gathered in a circle and Megan began social ice breakers with first asking all of us to close our eyes while standing in our circle, asking us to silently set our intentions for our weekend that we were about to share together in the name of self-care. From there we did introductions, I was not the only "non-farmer" in the

room, there was an extension agent, and another university person, and Megan introduced me as someone to have “informal conversations” with regarding my research interests. From there we played the question game, which essentially was identifying our demographics and backgrounds by moving to different areas of the room that identified with certain answers after the questions were asked.

The following insights/observations were made from that question game. There were about 35 women that evening, they ranged in age from one 60 year old woman to early twenties, most of the women though were either twenties, or mid-30s to late 40s. We were all white women, except for one woman who was there with her partner. (White women as farmers has mattered throughout the entirety of this research.) Most women were new farmers, for several women this was the beginning of the end of their first season. There were more livestock farmers in the room than specialty crop production (vegetables, fruits, honey, nuts, etc). Less than half were land owners and the majority of the land renters were operating under some form of an *informal* lease, whether handshakes to actual signed pieces of paper, paying rent or not. Most of the women were not from a farming background, only five of us had grown up farming, me included. We were all given the opportunity to ask the group a question, I asked the following: “Who started farming for environmental reasons or for human reasons?” The result was that about 25% of the group went to environment, 25% went to humans, and 50% of the group stood in the middle of the two polar groups. Some of the women had left, or were still working, in non-farming careers, many of the early twenties women were working on a farm as employees and have not been to college. This sparked conversations regarding farming motivations and what women cared most about in regards to what keeps them motivated to farm and sparked them to start farming. Eventually the circle ended and the group divvied off into smaller, self-formed groups. These groups stuck together over the weekend, I learned the brand new farmers/mothers had grouped together, those there that had previously known one another through other extension farm events had also grouped together this included all age ranges, and the early twenty-year-olds often grouped off on their own as well.

The following day, I held conversations with different women who approached me and wanted to tell their experiences as women farmers, as new farmers, and land-tenure struggles. The first woman I spoke with was an apiarist. She was in an interesting land tenure situation with an older woman who was in her eighties. The older woman would not do a formal contract with the apiarist because she was worried that the apiarist would steal her land from underneath her. This woman’s situation was extremely tenuous and she was worried she would soon have to find another

situation because her business was being held back by the fact that she could not operate independently on the land, preventing her from making improvement on the land to help her bees.

Another woman who spoke with me described herself and her partner as “not real farmers” because they “just do garden scale production with a few animals,” yet they run a small CSA for their neighbors. They wanted to scale up, but both were working off farm, with one partner in graduate school, it just wasn’t possible right then. This couple were the ones with the newborn baby and her wife presented a specifically for the female body, body mechanics in relation to farm labor workshop as part of the self-care theme of the weekend. Another woman I spoke with had started a seeds-production business on her in-laws’ property while she and her family lived off farm. She had been running the farm while her husband worked at a larger seed company, but recently had gone from being a full-time co-farmer with her partner to being off-farm employed a year after the birth of their child that caused her major injury. She went back to work and her husband became the domestic partner and run their farm. Another woman jumped right into livestock farming on her in-laws’ land also. She was a first-year farmer as well, feeling the struggles of farming on land that is not hers, while having to balance motherhood and farming, with her husband working off farm. This woman and another first-year farmer-mother commiserated together regarding their struggles, laughing together at how “crazy” their lives had become.

I left the retreat with some general impressions that continued to play themselves out throughout the formal interviews I would conduct. First, the majority of the women who were self-employed farmers on land they either owned or leased, were in their mid-to late thirties and older. Most of these women, had left previously established careers, or were starting their farms while still working, or their partners were bringing in off-farm income as well as contributing to farm and domestic labor. Some have been involved in the farming community for a long time, starting their “farm careers” as apprentices or internships on learning farms and programs in Oregon, while others had moved from out of state to purposefully start farming in Oregon. Most of the land-leasers were also mothers, taking on the responsibilities of the farm as well as the majority of domestic duties. Many of the younger women there were employed on other, “established,” farms as laborers or were apprentices/interns learning the foundations of farming. Almost all of the farmers considered themselves small scale and sustainable. Also important to note, one of the women stated that the “good information and answers [for farming questions and information] are not at the university.” This sentiment comes up again through some of the interviews.

Vignettes of Women Farmers in Their Own Words

Hannah, land owner, she and partner have careers, off farm-income

Hannah was the first woman I had met with in the northern part of the Willamette Valley. She had bought the 68-acre farm during the recession. She and her husband had both previously worked in the military, both were still currently working off farm. They bought the land purposefully to start a farm. The farm came with several barns and buildings, water lines, and other important infrastructure necessary to successfully begin a farm operation. However, the actual farm land had been conventionally farmed for decades, and at the time Hannah was still leasing several portions of the land to the conventional farmer that was farming/leasing the land before she bought it. However, Hannah had slowly been claiming back several acres every year to farm sustainably. For the past nine years, they had considered themselves “just hobby farmers,” but this year was their first “real farming” year because they had marketed and pre-sold meat chickens. Hannah’s hobby farming has mostly consisted of breeding belted Galloway and Highlands cattle, heritage breeds that are worth more alive as breeding stock. This year though she was raising meat 1,500 meat chickens and about 30 turkeys and was purposefully using the chickens and turkeys to remediate the hay field and build soil health. In regards to becoming a new farmer and the programs and information available to new farmers she recognized “not everyone has time or the know-how to search and research information sources.”

Willow, land-owner, started farming on the side this spring, she and partner run off farm business

Willow is just beginning her farm experience. She comes from a previous career in the Tech-industry and has lived in several places across the United States. Her parents were not farmers but her Grandparents were closely connected to farming and that’s where she was first exposed to and influenced by farming. She bought land in western Oregon starting during the recession, buying different adjacent plots over the years since 2008. Just this year she has begun planting perennials and hoping to one day grow tea to eventually have a perennial farm. She and her husband together run a non-farm-business which allows Willow to work on her farm during weekends and days she isn’t traveling for her work. She had previously apprenticed on a small orchard CSA farm before starting to grow on her land, using practices she had learned through farming onto her farm. She also participated in the Small Farms program out of Oregon State University, noting she was the

oldest one in the program. On her land she describes working with the topography of the land, working with what the land wants, rather than necessarily her wishes. Willow talked about the soil on her land as if the differences in the soil within just a couple acres of land being like the differences between sibling children, similar but very different in needs and how to deal with them. She said “The land’s always going to be here and I’m not...I feel like when my hands get in the soil, I can feel and see the life in it, you know we can’t see the microbes, but you can see the world, all the little insects, bugs and everything and you can see it... and you know for some reason I feel like I have a deep connection to it...I feel like I’m here to take care of the land and to make it healthy.”

Francesca, informal land renter, left job prompting her to begin farming, single mother

“Doing this interview was very therapeutic for me.” Francesca’s farming experience ended as quickly as it had begun. Francesca decided to start farming after she quit working for a position that was mentally draining for her. She took this position even though she had a degree in education, but because she had graduated during the height of the 2008 recession, she was not able to find full-time employment. The past year she had successfully market gardened a 50’x50’ plot that she sold vegetables out of at a local farmers market twice a week. For her, success was the fact that she broke even for what she had put into the garden, produced for her and her son to eat, and that she had enough produce to sell at market twice a week. Francesca was informally leasing a small area of land to market-garden from her Mother. She had recently dissolved her small farming operation because she and her mother could not agree upon land-improvements Francesca wanted/needed to make to in order to be able to market-garden more efficiently and effectively, and her mother suggested ending their agreement. Francesca has also participated in a local hour-banking economy since beginning and ending her farm and made important connections regarding local food.

Eugenie, land owner, first year, she and her partner both work on farm, previous careers

Eugenie and her partner decided to start farming after starting a family while living in a major metropolitan area. They sought out farming because they were interested in raising their kids closer to nature and concerned about how food is being produced as well. Neither of them had ever farmed or have a farming background, but both have had careers closely related to farming; she has worked in environmental-non-profits and her husband in the restaurant industry for two decades. They were specific and purposeful in their search for farmland, landing in Oregon based on the

politics of the area, amongst other things. Relying on savings during this first season, they are both working on the farm full time. They have used soil “health experts” not affiliated with federal farmer support organizations to help them guide how they interact with the land. They’ve heavily relied on internet-based learning resources for farm information. Eugenie came into the women farmers network after (in her words) “annoying the extension office with all her calls and questions” until someone directed and connected her with the women farmers network. The network being a place where she feels comfortable asking very specific questions regarding what tractors to buy.

Megan, land leaser in-transition, farmer training programs, off-farm income, partner on farm

Megan is the only person interviewed that has purposefully sought out farming as a way of life before trying to farm. She and her husband had both gone through on-farm apprenticeships working on other fully-functioning farms. When they sought out farmland, they were intentional in finding a situation where they were working with land-owners to co-farm the land, they also sat down with several land-owners in an interview type situation to determine best-fit for their needs versus landowner expectations. They were looking for more of a community-oriented farming experience rather than an arrangement that placed them as the sole operators on leased farmland. After two years though, it was apparent that even though they had pretty free-range over their farming methods, they were limited in their abilities to make further adjustments and improvements on the farmland because of differing value systems between themselves and the landowners. When I met with Megan, she and her partner were in the process of leaving their current contractual agreement and moving off the farm, in the search of other land that would better align with their farming methods and value situations.

Survey respondent demographics: educated, older, and farmers- for- longer

The survey informed by the above interviewees was sent out over the network’s listerv as well as a link posted to the network’s social media group. Here is a summary of various demographic attributes of the respondents, however, the details of the respondents’ answers to each question are available in the appendices. The sentiments and themes that arose from the surveys are included in the discussion chapter. Of the ~200 respondents, only 12 women replied, in the limitations section I explain why I believe my response rates were so low, in general it has to do with the wording of my

study and how most women do not identify with the words farmer and/or are not at a point they can even access land... The women who did respond are educated, only one woman indicated having only “some college,” the remaining 11 had at least Bachelor’s degrees, 4 indicated having a Masters, and one woman has a Doctoral degree. These women were also older, paralleling the age demographic of my interviewees, the youngest respondent was 35, the oldest woman being 69, with an average age of 48. Eight of the twelve women have children, which they say has affected their farming experience. More than half of the women have been farming for 7 or more years, only two indicated less than 5 years and less than 3 years respectively, two women indicated farming 5-7 years.

Ten respondents indicated that their farms were currently supported by off-farm income, although one additional respondent falls in this category with her “retirement pensions” supporting her farm, otherwise only one woman indicated her farm is not supported by off-farm income. A third of the women had savings of some sort to jump-start their farm, one-third did not have any savings when they began, and another third indicated “other” but two of those detailed answers show they too had some chunk of money to begin their farm. Regarding land tenure, ownership, and access, 5 women own their farm-land, (2 being on family farm land), 5 are on land they do not own, and 2 are working as an employee and manager on other farmers’ farms. These women indicated their farming methods and practices as mostly falling under “sustainable,” “holistic management,” and “regenerative” with 7 women indicating each of these, followed with 6 indicating “organic-practicing but not certified,” “organic practicing,” “biodynamic,” and “agroecological” all having 3 or less, with one indicating “conventional” practices. Finally, these women’s motivations to begin farming were ranked as the following, “environmental health and personal health” tied for number one motivating reason to begin farming tied with 3 selections each, “family health” was the second most motivating factor with 5 indicating this, followed by “environmental health” as the 3rd most motivating factor (“community health” came in second with 3 indications). “Community health” was the 4th most motivating factor with 4 women choosing this, and finally other motivating factors included: “social justice factors, non-human life, self-sufficiency, rural lifestyle, and aversions to other kinds of work.” However, “community and family health” were the most selected motivating factors, all 12 women indicated these factors somewhere on the scale.

Chapter 6: Discussion of Salient Themes

Currently, what constitutes a viable and successful farm-business has only been measured against conventional agriculture. However, there is a new generation of people entering farming who are not solely interested in profit maximization, as Maria Bellacasa's suggests "inheritors of the agricultural revolution are slowing-down to soil's temporality through understanding and becoming an actor within soil's ecological food web" (2015). Other forms of "success" exist in the world of farming in the United States and, as you will see below, much of that success is not necessarily succeeding in maximizing economic profits nor about maximizing crop-outputs through human-measured soil needs and inputs. These women are farming for other reasons, and many explicitly stated they are not in farming to get rich but started farming from some sort of care and concern for the environment, family, community, themselves and what they put into their bodies. In regards to a post capitalistic politics, these motivations to begin farming could be seen as a form of resistance to the capitalist agricultural system, where 'get big or get out' has been the driving force to reach competitive 'economies of scale' for competing in a globalized marketplace.

The ability to perform such care-work is filtered not only through gender, but through class, and educational status as well. As Jarosz noted of women farmers in Washington state: "this care ethic is shaped by class position in that it is possible to subordinate economic priorities to choosing a livelihood and lifestyle" (2011, 317). In my study, this is evident in the ways interviewees referenced the 2008 recession. The recession affected these beginner farmers in one of two ways: it enabled women with financial backing to purchase land while it was cheap, as was the case for Hannah and Willow, or it reinforced that current career paths were not viable and reaffirmed farming as a desirable alternative, as was the case for Megan and Francesca.

All the women who participated in this research were college educated at various levels. Many had left previous careers to begin farming, had savings or retirement income, or sold the material accumulations from careers to fund and jump start their farms. Eugenie and her husband had been living off their savings for the past year following the sale of their house in a major metropolitan area, which had enabled them to purposefully choose where they bought land. Almost everyone had off farm income supporting their farms, except for Francesca. Megan never had a before-farming career, she was intent on farming from her early twenties, and like Jarosz also noted within her population, Francesca being a single-parent, was solely dependent upon the income from her farming operation during the season. Megan's long-term involvement in the farming community

made her keenly aware of the land-access issue and its effects on beginner, small scale farmers. This encouraged her to seek out non-capitalist alternatives to accessing farmland, namely farmland to operate on in a communal sense, where she and her husband would not be solely responsible for the farm and its economic success. For her, the priority for land access was “an alignment of values” between herself/her husband and the land owner, with regard to farming practices and responsibilities to the environment. Megan’s remarks also suggest a need for deeper inquiry into why women are mostly small-scale farmers, as opposed to conventional farmers. Are they doing it because it’s what they are boxed into, or is it the form of agriculture they explicitly wish and desire to be doing, perhaps an expression of resistance to our overly capitalist agricultural system and its subsequent detrimental effects on human and non-human health?

On Becoming Farmers and Farmland Access

Building a viable farm business on land is not a simple story of either “yes I have access to farmland and am farming how I wish to farm” or “no I do not have access to farmland and therefore cannot farm;” it is far more nuanced than that. Holt-Gimenez asserted that farmers who rent or lease land do not perform improvements on the land because there is no incentive to do so (2017). The women in this research, like in other studies on women farmers and land improvements, have shown that economics, or return on investments, are not necessarily the driving considerations for these farmers, that care of the land is far more important. This is antithetical to operating a business in a capitalist economy where invested labor time and resources should focus on maximizing profits and the bottom line. However, women farmers want and try to make land improvements, but they are constrained by the structures that leasing and renting land often present. They may also be constrained by traditional gender roles even when they *do* own land.

While many of the participants who spoke with me are in fact landowners, even their abilities to farm as they wish on land they own are not completely free of obstacles. However, land leasers, whether formally or informally leasing, by far face the greatest challenges to using preferred farming methods and perform soil-care-work, even on land they are in-agreement, or paying, to use. Both the land-leasees who spoke with me were in periods of transition. Megan and Francesca had recently dissolved their land lease situations because they could not come into agreement with the land-owners regarding how they wanted to farm the land. Their abilities to do care-work were directly mediated by land tenure and competing value systems with their landlords. Described

through their words, these women farmer contributors and survey respondents, clearly demonstrate that land-access experiences require agricultural researchers to look beyond the assumed superiority of the capitalist agricultural system in order to better support these farmers... *“It matters what stories make worlds, what worlds make stories... decisions must take place somehow in the presence of those who will bear their consequences.”*

Multispecies Relational Care Work with Soil

“There can be no life without soil and no soil without life; they have evolved together.” – Charles E. Kellogg, soil scientist

If farmers and agriculturalists are first and foremost cultivators of soil, as the root of the word agriculture suggests, then the other species farmers are in relationship with should fall under the consideration of farmer as well. This is not to suggest that animals have not been previously seen as a vital part of the whole farm organism, but in today’s modern, Western agriculture paradigm, the importance of working with and caring for other species on the farm has become less important in the act of farming under the dominant conventional agricultural archetype. The women farmers who spoke with me and completed the survey, no matter their land tenure situation, do try to cultivate soil health and a relationship with the microbiology of the soil, in relation with other non-human species, even in instances where land tenure and land access is insecure at best. These women specifically spoke of feeling responsible for caring for the soil and land and for building soil fertility and health. To do so these women employed the natural tendencies of various plant and animal species, and the land itself, to care for soil-life. Like Mol’s (2008) “Logic of Care,” these women’s soil-care-work is multi-faceted and happens within their everyday farming practices. The care work involves not just the farmer, but on farm animal everyday activities such as chickens pecking and scratching the ground, and cattle’s grazing habits in the fields, technologies such as soil testing, and other non-human produced materials such as compost, manure, dead tree leaves, cover cropping...all used to care for and increase microbiological activity within the soil, which results in increased “soil health.” As several of the interviewees put it, the animals do the work for them in regenerating the land and soil, they as farmers are just guiding their activities on the land.

During a walkabout around the farm, Hannah and I visited the chicken/turkey hayfield. She pointed out the areas of the field where the grass was greener than other patches. Those greener

areas were places where the chickens had previously pecked, pooped, and scratched through. Earlier that year Hannah and her husband had seeded grass-field and clover seeds on the field in anticipation of intentionally grazing and moving the chickens and turkey's around the field, utilizing the birds' natural tendencies of scratching the surface of the soil for worms and insects which would deposit the seeds, then their nitrogen rich poop would fertilize the grass seed and the nitrogen would be fixed into the soil via the grass seed's roots. Hannah described the intensive grazing methods they used with the cattle to reinvigorate soil health and capture carbon in the various closed off pastures surrounding the chicken field. She talked about how each year they notice more wildlife existing on the farm, this year alone they noticed Red-Winged Blackbirds, several White-Tailed hawks hanging around and hunting on the farm, even though they are near a wildlife refuge. Hannah also said they were not interested in becoming certified organic because what they were doing on the farm "is better than organic, because organic certification still allows for chemicals to be used." She also added that "my farm is open for anyone to come check out," meaning that they are as transparent as possible regarding how they manage their farmland and care for their farm animals, and have nothing to hide. This contrasts greatly with factory farming and subsequent "Ag. Gag Laws" in recent years that intended to 'protect' factory farms from consumers and everyday people walking onto and viewing the atrocities of confined animal farming operations, or CAFOs. These large-scale factory-farming operations being the preferred method of "animal production" within a capitalist driven agri-industrial model.

Gendered experiences within farming and knowledge networks.

Women farmers have a different experience performing and experiencing "Farmer" than do men. This is evident in both earlier research and in the study presented here. Women farmers discussed how being a "Woman Farmer" affects their experiences in male-dominated farming communities, how they create community, how motherhood and children are both advantageous and creates boundaries in their farming work, as well as where and from whom they access farming information and advice. Upon presenting the findings of this research back to the community, I realized my assumptions and biases about the women farmers land-accessing community network had restricted my population. For example, I was told that the term "farmer" is a term women may not identify with, perhaps because the size of the operation is small and not feeding many people or because they feel more comfortable with the terms rancher or producers. The term producer is the

one that most, if not all, vegetable, fruit, nut growers, and livestock owners identify closely with. It is also the all-encompassing general term used by the OSU Small Farms program and the Beginning Farmer and Rancher program to address members. I had automatically limited who would speak to me and who my recruitment materials would relate to be putting out a call for “beginner, women, sustainable farmers, leasing land.”

It is interesting that these women farmers’ gendered experience intersects with their class and educational backgrounds; they were all savvy in navigating the internet and various other information sources. This was, in fact, their preferred way to access “research” and answer questions regarding their farms. All of the women interviewed, except Megan, discussed researching on the internet and getting drawn into “research black holes.” This was echoed in the surveys responses as well, where Google and the internet were the most often mentioned go-to resource for farming related questions. Hannah, Willow, and Francesca, and Eugenie all mentioned farming-related social media groups to which they belonged, some world-wide and some regionally-based, having thousands of members. The women farmers network itself is a web-based-listserv with an adjacent social media page with well over 200 members. However, face to face gatherings occur only a handful of times a year and as Hannah noted, sometimes no one comes to them. How the internet is changing farming and farming communities is an interesting question for future researchers to ask, especially since pre-industrial-farming communities were reliant upon their farming neighbors for advice and help, while the women small farmers in this study prefer to seek information online.

The majority of the interview data for this section revolves around where women are accessing information for their farm operations. Some also described specifically gendered interactions with various information sources, and farm supply sources, and how gender impacts their experiences as farmers. However, Meagan’s discussion on gender and networks is especially insightful, I believe because she has been involved in the Oregon farming community and has facilitated women farming community building in some way for several years. She presents questions regarding women that are maybe not yet being asked about farming women who still exist and work within a patriarchal paradigm. She rhetorically asked about women being ‘forced into’ labor intensive, small scale agriculture due to inherent, subtle, discrimination in access to larger, male oriented and dominated, scales of production, or as several survey respondents described their experiences being the only women in their kinds of farming/ranching/producing, it being the “good old boys club.” If the current mode of capitalist agriculture is to shift towards being more care

centric, and environmentally concerned, these lived experiences of the fastest growing demographic of farmers must be addressed as a pattern of exclusion and limited access.

Finally, Motherhood as a motivating force and barrier for farming was discussed in most of the interviews and by many survey respondents. Out of the 17 total women who interacted with the formal research, 12 had children and 5 did not, this is significant because currently there is no research examining the intersections of motherhood and women farmers in the United States. Several women discussed their positions as mothers as enabling them to be more patient and attuned to their farms, as a motivating force to grow clean and healthy food. Motherhood is also seen as a barrier to their farming practices as well, both in reduction of physical strength and stamina post-partum and the time and attention needed to be given to children versus the farm. These qualities and the questions Megan raised need further examining if women farmers are to be supported, but also as Megan noted in her interview, the women's farmer network was a space to voice these issues and commiserate with and support other women-mother-farmers, something not available within programs and organizations formed for and by our current patriarchal agriculture system.

Limitations

Several women farmers said most of the young women, beginner farmers they know are still in apprenticeship and internship programs, and that when they leave those programs they are generally are looking to (or perhaps only able to find) work on other already established farms as laborers, or as farm managers. These positions may not provide sufficient financial and social capital to begin seeking out land of their own. This is another area that needs further study. If most of the women in my research population had some type of previously established financial or social capital which allowed them access to land, how do those women who have farming skill sets coming out of apprenticeships, but without strong backings in either financial and social capital even begin to access farm land? This is an especially pressing question when we consider that women farmers under 40 are the fastest growing new farmer demographic and land and capital access are the two strongest obstacles to starting and continuing farming, what are the success stories, what is the most needed support areas to over-come these obstacles (Lusher-Schute 2017). The National Young Farmers' Coalition (NYFC) is one organization that is leading the charge in these areas, further academic research could only strengthen the NYFC's work within communities and at the state and federal levels when NYFC is advocating for policy changes and support. The USDA Census of

Agriculture provides numerical data but does not provide the context needed to help local and regional organizations to support their farmers. Further research could provide the backgrounds needed that could connect people with land. Localized story telling through farmers' experiences could provide on the ground local organizations the information to better meet people where they are in regards to connecting people to people with land.

This study initially hoped to address intersections of race in regards to beginner women farmers. However, no black, indigenous, or women of color (BIPOC) farmers were interviewed, nor did any women self-identified as not-white on the survey. I believe the absence of BIPOC farmers possibly indicates the lack of inclusion of these women, not overtly, but it begs the questions why aren't women of color included in the population sample and events I observed? This question of whose voices are missing has thankfully begun to be addressed by administrators of and organizations that support beginner farmers and small farms. I have tried to address the absence of these women farmers from a specifically women farmer's network, to create space for further discussion and inclusion. Further research needs to address why minority farmers are missing from these programs, networks, and organizations that explicitly seek to support them. Also, future research needs to address why young in age, women beginner farmers do not identify as land leasees, what are they doing post-internships and apprenticeships, are their land access experiences completely different than the older-women discussed in this research, or is land-access/starting a farm even on their radar?

Chapter 7: Conclusion

If women beginner farmers are interested in agro-ecological farming methods and increasing soil health through building a relationship with the soil microbiology of the soil via care-work, then they need long-term access to farm-land. Hopefully this research sparks further conversations about beginner farmers' experiences in seeking land-access. As an applied anthropologist and a farmer, I believe the connection between increasing soil health and having secure land tenure is clear. If farming is going to be used to mitigate climate change or heal any number of other planetary ills, it has to adapt locally, which means researchers, organizations, and policy makers must focus on localized experiences and increase secure-land-tenure.

The most practical and applied aspect of doing and presenting this research to the community from which it came, is that it served to jump start many conversations between women farmers and bringing them together in the furtherance of community. It also started a conversation among network administrators about conducting an evaluation of the women farmers network, to better understand who the network is serving and who is being left out, how are women using the network and how could it be used to reach others. This is significant because the network is more than a decade old and this kind of evaluation has never been done before. For a conclusion to this research project, I could not have asked for a better ending, research put to use within its original context and informing the community.

As for me, this research affirmed that caring for ones' community, family, self, and our shared global home, is one of the most radical positions one can take in a globalized, neoliberal economic system bent on extractivism for profit. My experiences within the women farmers' network provided an example of what alternatives to a competitive, individualistic, boot-strap ethos foundational to industrial agri-business, can look like. I intend to foster alternative support systems and knowledge sharing through beginning a network of women farmers in Southern Ohio, taking care to provide space for women farmers to cultivate relationships amongst other alternative farmers so that we can continue taking care of human and non-human life through and with our farms. Finally, this research project has encouraged me to consider activism through subverting the dominant agricultural paradigm by feeding my local conventional farming community by growing actual, healthy, food rather than allowing what is technically a "food desert" to continue to waste away. Care is needed here as much as anywhere.

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Appendix A: Interview Transcripts and Survey Questions/Answers Organized by Thematic Section

1. Thematic Section 1: On Becoming Farmers and Farmland Access:

Hannah: (*On buying the farm*) "...then I was in the air force and then did my time in the air force and then I got a degree in finance and I worked for --{name removed}-- full time which afforded me the ability to buy land because otherwise you know that's the hardest part right? We bought it [the farm land] in the recession and so otherwise I could not afford this amount of land. But we have sixty eight acres here. So, we scraped all the couch cushions to buy this land and then you know for me living on land you have to do something with the land..."

It was purely by accident. I was at work and did this quick search and this bland piece of land popped up and I got really excited and it was in 2010 or 2009 right in the middle of the recession. So, it was like I could maybe buy this. I actually have a job I maybe could buy this and so I finish work came out in my gear and high heels walked around the plowed field in the middle of dusk and I was just so excited that I'd come across this. And it's been on the market for a long time, I just had never come across it. And so, then I told my husband who was traveling overseas, I was like I think I've found our land. It's 30 minutes from downtown it's 30 minutes from work it's like 10 minutes from the nearest coffee shop. I think we found our land and so I was like I hope you agree with me because I would like to make an offer.

It took six months to buy it because it was middle of recession and nobody wanted to loan any money and we had good jobs but farmland it's just hard to find a lender. And so, I lost like two or three lenders just along the way because whatever the value of the house wasn't enough compared to the land or whatever reason, there's always something and they wanted us to put some ridiculous amount of money down. I couldn't do that and, in the end, I almost lost it but then I and the lady who was selling it, the land was in a trust. I was about to lose it because they said, "oh well the value of the house isn't strong enough for the amount of land so you have to put 30 percent down." And I was like I can't do that. And so, I talked to the owner and she carried a second [mortgage] and I figured out how to buy out her second with another second. So that I could get it in my name and leased and then figure it out from there. So, it was a little ordeal but in my former life I had been a mortgage loan officer so I knew kind of the term to do. So, my little life experiences helped me get here.

I did look into USDA Loans. I didn't know enough about that kind of stuff to do it. And I knew about conventional loans but I didn't really know much about ag loans. I did try to find I think I did do a quick search but I was just because at the time of the year in the recession there are just so few people doing loans. It was really hard. I finally got Northwest Farm Credit to lend it for us initially at a really high rate. And then we figured out how to use our V.A. benefits to finance it later when the rates went down after it had a few years..."

Willow:

"So, I've worked in technology up in (Name removed). And then I had my son and then my husband and I moved back to Connecticut so he could work at (name removed) Corp. And then we moved back to move. To Portland. And then we've been here for about 15 to 16 years. Well I had my daughter back in Connecticut and then had two kids in Portland. So, before we moved to Oregon, I remember my husband saying he wanted to have like some sort of like a Weekend Getaway In Oregon. So, we weren't really sure where and so after a couple of years. We bought the house in Portland a couple of years went by and I said you know. If you really want that like weekend get-away, we better buy it now. And it was like it was like 2008, the real estate market was like at the bottom. I said that now would be a really good time to buy something. And so, we went around to look up and down the coast. Somehow, we'd settled on the coast. We bought the piece of property we found in Netarts, this really a small town. I've never heard of it before, and I'm from Oregon. And I just. So, it there was like three properties or three plots altogether. When we bought the one in the corner. So, we bought that and we built a very small house on it. Like eight years later the property next to us came up for sale. Nobody lives there. I mean it's just a flat land. And I said I want to get that before somebody else gets it. And then six months later the property just to the side of us, which was about acre, came up as well. And I said I want that spot and he was like "what are you going to do with it." I said, "I'm going to start a farm on it." In 2008 they were all for sale at one time at the same time. So, we bought all three at separate times. So, my husband was like OK you can do whatever you want. Then I started doing research as I put rows out there. So, then I started attending like the Small Farms conference and I started reading books."

Francesca:

So, I have a Bachelor of Arts in English literature and then I went on to get a Master of Arts in Teaching. So, my original intention was to be in middle and high school language arts teacher.

Unfortunately I completed that degree in summer of 2009 when we were in the middle of the recession and the economy was horrible and I'm not sure if you were going to Oregon at that point but Oregon in terms of educational jobs was in particular stress out of my cohort of middle and high school teacher graduates which I believe there were sixty-five-ish of us, I think eight people got a teaching job their first year out of our grad program and a couple of those were because they were able to move out of state or be recruited by Alaska and Hawaii that recruit pretty heavily among teachers in the Pacific Northwest because it's hard for them to get people to move there....

I was developing or worsening some depression that had probably been around for a long time and I kind of had the knee jerk I have just got to get out of this job. Kind of a feeling and although that might not be a big deal for someone who's in their early 20s who's single to figure out, I at that point had just turned 30 and had a kid to take care of and no partner anymore. And so, you know the income aspect of life was on me and so I made the knee jerk and very satisfying at the time but possibly not very wise or mature decision to resign from that job not knowing what was going to come next year.

And so I took that leap of faith and part of taking that leap of faith involved me calling my mom and doing the asking if I could come back and live with her while apologizing for asking if I could come back and live with their kind of all in the same paragraph and she said Yes thank goodness. I'm thankful for her support. We have a complicated relationship but one day when push comes to shove with tough stuff in life, she's supportive which I'm thankful for. And so yes early September like Labor Day weekend or 2016 we moved out of my little townhouse my son and I shared in Salem and we moved back out to the country to my mom's house. It just so happens that my mom lives on the edge of (name removed) and has about four acres and she has most of that is sheep pasture so she has a very small herd of sheep that are basically just there to be lawnmowers and hopefully this isn't defensive but also to be eaten. And she she's had them for about 10 years she's owned the house for about 15 and I was glad to come home but not glad to come home. And still wasn't sure what was coming next. And throughout that fall as I was panicking trying to figure out what was next. I really started thinking more and more about agriculture. I ended up checking out a couple of books from the library that were sort of the romantic dreamy side of farming but that I you know read and appreciated and realized yeah. But you have to have a huge skill set in order to make this work successfully. I want to know that stuff or see where my knowledge gaps are so then that winter I started checking out more knowledge based books from the library....I mean I've always kind of on the side been interested in sort of self-sufficiency homesteading type of stuff and

at some point it was probably in some Facebook group or something in which you know someone recommended a book and I thought that looks interesting and I being unemployed living with my mom and poor wasn't just going to order five books off of Amazon that night so I instead logged on to the catalog of my local library and looked them up and saw that there were several of them and would do and then check them out and started reading them and I decided over that winter that I was and I guess somewhere in that mix of that fall I started driving for Uber and Lyft for at least some sort of basic survival in your home. The student loans don't magically pay themselves kind of income. And so I started here in October I think driving through Uber and Lyft on the weekends just to have some sort of an easy I get to set my own schedule moneymaking that isn't going to ever be a full time income in this area but it was like something to maybe reduce my panic about money a little bit and then that winter I really started thinking about you know this land that my mom has and how she utilizes it or doesn't. So yeah sometime during that winter of I guess 2016 going to 2017 I really started wondering: What if I could grow and manage a big enough market garden. I mean farm felt kind of ridiculous to say because I knew it wasn't an option to go buy a twenty thousand dollar tractor and still up my mom's you know almost 4 acre property and just start doing this all by myself I had a sense of scale and maybe a sense of what I could handle and you know that that people who are managing several acres are also hiring a couple of people to help with that process and then I wasn't at that level yet at least. However, my mom has had for the entire time she's owned that property like 50 by 50 foot vegetable garden plus a bunch of raised boxes plus a bunch of established blueberry bushes and fruit trees and things like that. And I kind of started thinking: what if there's sort of a little cottage industry in this or you know what I could make from this space be enough to have a farmer's market move. And somewhere in the madness of the winter being dark and depressing and the thoughts of spring and growing things being so intoxicating. And then and then the seed catalogs arriving in January which is like a craft free people who learn who love to grow things. It's really really bad. And it really should never come around the same time that you're thinking about when you're gonna do your taxes and whether or not you're gonna get a tax refund because then that's a really dangerous combination. Oh my gosh. But yeah that's what happened. And I started having conversations with my mom around the New Year. You know "Hey Mom you haven't grown a garden in this space for like two years now because you're just kind of getting tired of the work associated with it. How would you feel about me doing that?" It had just been covered with straw for a couple of years just lying fallow. And which was probably good for that soil anyway because she had treated it pretty unkindly for a number of years because. She

doesn't have the same ideas about how to grow and maintain soil as I do. But eventually over these conversations that we had in maybe January going through February.

We decided that not only was I going to grow in that 50 by 50 space that was already established and had been for years but that we were going to fence off about a 50 by 100 foot area right behind that move the fence line because of the sheep. Otherwise we wouldn't have needed the fence. The fence is actually rather problematic for a lot of reasons. But the sheep eating everything would be more problematic. So, it is what it is. So yeah, we decided or she decided she would be OK with me expanding that space because I felt like maybe a 50 50 space, I'm going to end up you know selling like 40 dollars and produce at a farmer's market every week. We're doing a heck of a lot of work to make 40 dollars a produce stand every week and paying a booth fee at a farmer's market that will then take half of that away. So maybe I should grow more stuff...

So, I did a season last year but I also hardly made any money. And you know in a way that I kind of expected and yet hoped that I could beat the curve of most small businesses don't turn a profit their first year or even break even. And so, when I sat down and actually added everything up and did all of the bookkeeping I had let fall behind for several months during the busiest time of the season and I was like well I broke even. Well that's something, I broke even on a tiny, tiny miniscule budget compared to a lot of farms you know where I was like OK if I spend more than a couple thousand dollars this year doing this whole thing that's just too much for me to do right now in terms of financial precariousness you know and sort of this this unrealistic optimism that like I can start a tiny farm with no money I can do that as well. The tricky thing where and why I'm not doing it again this year came in the late fall and over the winter having conversations with my mom about whether I was going to continue doing this on her property that how she felt about that whether she was OK with me kind of informally leasing part of her property for a small business from her. And basically, she was. She was OK with me continuing to grow stuff. But there were things, infrastructure improvements that I really wanted to make on that property in order to make the whole process more sensible and smooth for me. Like a proper washing station with the roof over it and better irrigation systems and I was going to apply for the high tunnel grants... But you know because it wasn't my property because I was living there but it wasn't my place. You know it was all "Hey I'm thinking about doing this how would you feel about this mom since you're the property owner" and she just hands down said nope none of that is happening on my property. You grow stuff but I am not OK with you know a washing shed attachment being added to the barn and I am not OK with any sort of permanent irrigation stuff going in. I am not OK with a hoop house. I don't care if it can

be deconstructed in the weekend. It's too permanent for what I'm ok with. So it's frustrating but I have to say OK you know I have definitely already pushed to the limit of my usage of a garden space on your property this year and you know I've left mud all over the kitchen floor you know and have used and used and used resources on this property that are kind of yours and kind of mine but that I've abused and used to know tons and tons and wear and tear replaced a couple along handle tools for her now and things...

You know like I did a market garden for one season and then I realized I could do it again this season but I know now kind of where the problem areas of things were and the fact that that you know DIY washing table that I made for myself out of like chicken wire and some wood and a weird little rigging of basically so that I can pull the trigger on a watering wand and have a shower down on the washing table while I scrub things and you know it was like really cute and a good first attempt but it was definitely not the way that things should be if I want to be able to move more volume of stuff through because I was already realizing you know harvest days are like picking, picking, picking and then washing until I literally can't see anymore and then wondering if I should stand outside with a headlamp in it and realizing no if it's dark you need to go to bed because you have to get up at four thirty tomorrow morning to do market and just realizing a lot of the reason that those things were taking me so long is because there were things infrastructure wise that I just didn't have that I couldn't afford and that ultimately I didn't have permission for because it wasn't my land. But I also don't have the money in the bank to purchase land and if I'm going to lease land it would either have to be really, really close to where I'm already living or would need to offer housing that is appropriate enough for not only me but also for my kids because you know he deserves to not grow up in a tent at the edge of my market garden field and although I am pretty comfortable with roughing it in a lot of ways he doesn't need to do that for his life..."

Eugenie:

"Anyway. So, we were living in the San Francisco Bay area. That's where (name removed) and I both grew up. And we had a couple of other kids. So, I was staying home with them. Because I was, I was working in environmental non-profits and I wasn't making enough to offset any kind of child care and I wanted to stay home with them. So. And then at some point when they were about five. We both started getting really dissatisfied with the just. The amount of traffic in the Bay Area and the lack of like natural spaces. I mean they're around there's a lot if you look at aerial map that a ton

we were living in the East Bay there's a ton. But you know you're you got to sit in 45 minutes of traffic to get there and you have to plan your days around the traffic patterns and it's super frustrating. And I'm sure you know having a little kid strapped in a car seat and they're start getting agitated and you're stuck in traffic. It's kind of the worst thing ever. Two screaming babies while I'm stuck in traffic and I can't do anything but sing to them or try to talk to them or turn the music off when I can't even stand it anymore. It was anyway so and my husband was not liking his job. So, we were like Let's get out of here like let's move somewhere where you know all these various things, I want schools where you know my kids are introduced to nature. My dream was an outdoor school. Yeah and those are few and far between. We did a huge research project to find out whether we want to go...And we looked throughout the entire country. I mean we crossed off without even looking into it, large swaths of the country. You know we're looking for a place that had a lot of nature that had a very liberal voting record. You know we're looking for places that understood the value of sustainability and social justice. And you know, not being a dick. So anyway, we eventually decided. We came and when we first moved here, we moved here without jobs. We sold our house in the same day. And that was what kind of made it possible because the real estate market there was kind of going crazy so that allowed us to kind of plop down here live in a rental for a while and look out. We knew we wanted property. You know with some acreage just I really would just want my kids feel run around and climb trees and build forts and get muddy and...

So, then we started seeing shit there's a bunch of sort of small organic farms here. This is a place that really values local food and organic food. You know maybe we should do that because I've been growing food and flowers for most of my life but never on this scale or never for sale and never to support our income. But I knew that I had you know a lot of the skills to do that. My husband has been working in the grocery industry for like 25 years so he knows a lot about.

You know that whole side of things. So, we were like let's just go for it. So, we found this property was not ideal. But I could make it work. You know it remains to be seen whether. We really had our first year and it was a huge learning experience. And not at all profitable. And you know I don't imagine I see a profit for some time but to either view or come off the farm and have that you know I used to I was working for a local nonprofit and I just found that I couldn't juggle starting a farm working off farm. You know. Kids meals you know all that's I was going crazy. So, we are sort of relying on our savings right now. That is getting smaller and smaller and at some point, we'll have to adjust. Whatever it is they're gonna have to work or we're going to have to go back to work or we're going to have to. I don't know. So right now we're focused on really lowering our cost of living.

We're making all of our own bread, our tortillas, granola bars, all desserts are made from scratch. You know we're getting a lot of stuff in bulk. And yeah, we you know froze mainly froze a lot of our crops from this past year. So anyway, doing whatever we can, but when we found this place, we were just like holy shit this is so awesome like it's so lovely, it's so lovely.”

Megan:

“So, the farm itself is under 70 acres just a little bit under 78 acres but a lot of that is woodland riparian. There's about twenty five acres that are on pasture and there was a one acre fenced in plot that had been used for vegetable production. So, when we came in, we took over the management of the livestock which was being run on the pastures 15 acres or so pastures to different areas paddocks. And so, we were actually given a lot of freedom to refine and develop systems. So, when we went there, we were with our background and training we were able to identify like the pasture had really been poorly managed. In fact, there had been some significant damage done to it. There was a period of time where they for hay purposes had decided to level the field to make it easier to hay. But what they did was just strip the topsoil from half of the soil from the field and move it down to the bottom half of the pasture. So, there were just things that we kind of stepped into and did some observations. But we were given a lot of freedom to say they look let's try a more intensive grazing let's do rotational grazing. Let's think about how we can renovate it let's not give them free reign on a whole pasture but that process also involves some cost which that was the wonderful thing about the situation is they were very into incurring you know paying for it through the farm to develop these ideas and practices and so that was one thing we did. And then they had never done vegetable production. So, we brought that and in our first season we were just trying to understand the land. And so, we also were curious and that one acre plot how intensively we could grow. So, we just like then to doing a really intensive planting and basically, we're working up areas that have been grass for years and years and years and so that was just an experiment. The other experiment was with how we would market the vegetables and getting to know the area. So, there was the existing farm stay operation. So, our first idea was just let's see how much we can move to gas that are already coming to farm and have some of that that we would sell vegetables to. So, we learned a lot in that first year. I mean we'd built a green house in that one acre that ended up just getting so damp and there was a lot of moisture issues and a lot of challenges of learning a new site. And that was the thing that because they hadn't done vegetable production and they didn't come from a farming background. There was a lot of information that they'd been pretty confident about that wasn't

actually that helpful in terms of that first year. And then the second year was about refining systems. So, we were continuing to explore that vegetable production piece and also simultaneously we really you know one of the agreements we had with them when we arrived was that we were organic and biodynamic farmers and we wanted to certify the land if we were gonna be there. So that was a process that we started. Also, one of the things that was not matched with a shared support. So, it's always kind of a bit of a challenge around that piece because it costs money and the nature of the land being so large and we've got some great mentorship for that. So, there were some of these things we were still in the first couple years what we were attempting to do was to explore how much we could grow and develop our own farm enterprise there while also managing what they already had in place livestock wise and farms. And they had never encountered organic and biodynamic certification type things it was not even anything on their radar. It was on their radar they just don't value it and it's also they come from a business perspective. So, you know their response always was supposed to show us how it would pencil out or how we would be able to do it. So, you know for instance actually certifying lamb organically is quite challenging because of parasites. You know it's not impossible and you can still manage it that way but you know that potential costs you're going to incur and the difference in how much you're going to be yourself able to sell them for and to their existing market may not be enough to it's not an easy sell necessarily. And so that's one thing that we discovered is that these motivations don't always I mean they don't always pencil out. I mean you have to have a sense of what something costs or how you want to steward the land and that has to be worth it to you to sometimes not. And it's tough in farming when it's the profit margin so slim. But yeah. So, there was an awareness but not a value for it....So this of course has interestingly enough stirred an understanding for the drive to own our own land because of the stability and also because of the option to be able to really create the vision of a space. So, I think we're a little bit more open to thinking about what that could mean for us in the future. And again, we have no capital and so it's not something that we'd really be able to easily accomplish. But there's a part of us that's still so deeply values community and partnerships and collaboration and because. We're more clear than ever we don't want the (my husband) and Megan farm show we are exploring partnerships still. And so, at this point (my husband) is kind of spearheading that. And so, he's gonna be dedicating full time. We have some realities around how long that can take. So right now, actually we're kind of in this interesting space of having work opportunities on a few different farms some of which are living on farm as well some not. And some of them are really amazing farm opportunities in terms of the job and learning and connection

and then the other ones are potential partnerships or something that developing a relationship that could lead to a more collaborative farming endeavor. And so what we're trying to decide it's almost like a heart and a head choice at this point right now is do we go at the head choice which is going to be a little bit more stability which is like more farming as a job for (my husband) and some opportunity for me to become involved or do we go at the hard choice which is like this relationship could potentially lead to more of our dream farming scenario. Interesting enough while that's all playing out our search for a place to live has connected us with some land access that could be very exciting and interestingly, we've connected with the land owner who deeply values organic practices and owns a large farm that he leases out. And just recently he bought like the little connecting corner piece of that property and he is seeking land stewards to come in and he wants to own it. So, you can be sure it doesn't. It's not to make sure that it's practiced organically. And there's a lot of possibility with that relationship living there. And while we're not going to start our own farm on that property right now, we might choose to live there and help regenerate the land and steward at work with him on some fun and creative projects like beneficial hedgerows and renovating the pastoral goats and pigs. And that could be something that leads to land access. I mean that's a situation where we might enter into a living situation that could lead to access to land as well.

Rosa: And correct me if I'm wrong it sounded like your previous placement was just like a handshake lease type deal?

Megan: So that's really interesting because you reflect on the process. We had an employee employment contract with them and we had talked about all kinds of profit sharing models and things like that when we first were having conversations with them but we were uncomfortable with that kind of agreement. From the get-go we'd be more comfortable with a straight employment contract so that we could learn the ropes understand what's happening here and then we revisit and grow over time. But you know they're just basically we entered into a situation into a business where there was nothing on paper and there was no time no analysis. There was no enterprise analysis that they didn't have a concept of even like regular tasks that were done. So, we entered in and kind of created that documentation for that farm and did budget analysis and enterprise analysis on the sheet the farm stay the vegetables the you know the forest management and trying to do a time budget. But in terms of anything on paper we did not have like a long term sort of lease or long term commitment. Nothing with our house. Except for just an agreement that if we left, we would take it with us. If they didn't want it. And one of the things that I really thought about since then is after two years we sat down with them to really do some vision work which is ultimately what led us to

this process. We did an annual review and said Okay great. This was all the positive things that were happening. Now let's look to the future. And it was that there was a strong resistance to spending any time doing that kind of vision goals strategy work and now. And so, what I had interpreted in the beginning as being just a lack of like a very exploratory like openness I see now is just actually not valuing of that process or the importance of having clear vision statements goals. So, it's kind of an interesting lesson learned. And now I would not, we will not be going anywhere where there isn't clear value statements things written down an interest and prioritizing of that process. For a work or a living situation.”

2. Thematic Section 2: Multispecies Relational Care Work with Soil

From Hannah's interview, in her own words:

“In the winter they're [the cattle] in kind of sacrificial fields because Oregon's just not very conducive to rotating, but through about March through when we get really dry, maybe you say August/September we rotate them basically everyday they get a new set of pasture. We do Hotwire neural Hotwire trains [fences] so they just move daily and the chickens are all pasture raised. Chickens get moved twice a day always. My whole thing is soil health. We bought this land and for a long time it was leased to a pretty conventional farmer he's been farming this land for like 40 years. He's a wonderful person but he does conventional farming so that means Round-Up and we're on a well and I always hated every aspect of it. And he tills the land every year. And then we had that really bad rainstorm in winter 2016/17 and we were walking the fields after he had planted spring wheat and --- I'd been doing a little bit of research about regenerative agriculture --- and I started to notice: Oh well we have desertification happening in part of the land where the run off is just separating the layers and you can see gullies forming off the hills and we're right next to wetlands. I'm sure there's plenty of runoff of our soil. Some years we flood and so that land is just all the topsoil it's getting washed out.

That's when we were like right, I don't like this anymore. We had been on the land long enough to feel comfortable with the heavy machinery and how we can we could actually manage this amount of land now. We couldn't initially. So, it's been over time as we've gotten more confident in ourselves. Now we've taken all the land back. It's all under our control. As of this year, this fall, because the front field was a clover field, 20 acres. The last 28 years he was farming with clover and we told him when he was done with that land, that crop, we didn't want to interrupt his season, but when you're done, then we're going to take this back. And they didn't have a very good crop because

of the weather this year. And so, they just said we could have it back. And so, we're kind of excited and a little scared. But we just got through planting 50 acres of pasture grasses and cover clovers and stuff to try to get over this drought, getting some roots in the soil.

...

As far as land goes like it's all about right for our business and our farm. We basically say that everything starts with the soil. If we do right by the soil. Everything stems from that. You will get good food and good water and good air but you have to start with the base. Watching the soil recover, we are working, we took soil samples. When we started on the land that had just been conventionally farmed and we took soil samples this year. And so, for us it's hoping to see increased organic matter and natural chemistry to be balanced naturally right without a bunch of chemicals and even just running the chickens around the fields and then watching two weeks later as the grass comes up behind them like I would show my customers I mean like look. Do You see, see this! See those green strips which were you know nobody else cares about this but me I'm just so excited. Nitrogen again thank you too and it was free. They just put it there for me. I didn't have to pay for it.

So, I totally get very excited about that. And I'm really excited to see how these chickens have done across this 3 acre of pasture. All summer and a couple of times back and forth now. And so, I'm really excited to see what happens in the springtime. You know it was always a kind of very worn out pasture before we knew what we were doing we would hay it and it just extracts nutrients right and so we did that for a few years and. It was getting worse and worse and we're like oh we're getting less and less hay. And that's when I asked then I learned what's going on. And then we're like Oh OK. So, we are using the chickens on there to help us recover it. And we don't hay anything anymore. I mean we still buy hay so we're still bringing nutrients in but we're experimenting with [hay]bale feeding.

They are feeding out pastures we want to recover, there's a kind of a wet dry area and we're putting certain types of hay out there as well in those areas to see if we can get it to self-seed because the seeds are so exorbitantly expensive. They're like well let's just pay six dollars for some bales of hay, throw them out there and let them eat it and they can poop on it lay on it you know and what's wasted is actually not waste. So that's kind of what where we're at now is: nature doesn't waste anything, there's no such thing as waste in nature. And so it's sometimes you have to wrap your brain around that like oh I should put that hay in a feeder so they eat it all and then I'm like well but that's not what we're trying to do in this situation, we actually want them to waste some of it.

There's a guy who does this called A Haney test which is not just your basic soil chemistry but they look at organic matter and he's like the soil NRCS guy. But he is so into soil health and he's got just a wealth of knowledge and he developed this test where they test organic matter and a bunch of other more holistic testing of all of your actual soil biology to see if it's more balanced. I'd like to expand like silvo-pastures, it's basically where you farm between the trees. They space the trees farther apart so the grass can still grow and we can still graze our animals and then you get a three-dimensional farm. So, you get grazers there. You maybe plant nut trees or fruit trees and then you get another crop or you can even plant an agro-forestry kind of setup where you do poplars or something and you get a timber crop. So we'd like to because I notice when we walk the land the areas that are about 20 feet from a tree line where the other side gets a bit shade- it's [the grass] much healthier pastures than another 30 feet out because it just gets that rest from the sun and the dew from the morning. So that always stays green whereas I step out another 10 feet and it's death's door because it's so dry. So, I'd like to try and silvo-pastures and there's another one called Key-line design. But you use the contours of the land to guide where you put everything. Whether it's a road or trees or water ponds or storage areas like that.

These are very things that kind of pre-date permaculture but I think they all feed into permaculture as well. So, I would say that you could probably extract most of that from permaculture but permaculture is a bit of a cult. Some of it is too restrictive whereas there's a guy that takes all these kind of components and he also is interested in being not only sustainable from a land perspective but --- from my perspective I should be able to not like mortgaged to the hilt or give my time away for free to be on land--- so he takes all these components and he's in Sweden or Switzerland and he farms up in the hills like 25 acres and he does a combination all these things it's called a ...I'd have to look it up, Richfield or I can look it up for you. But he does YouTube videos too.

But he doesn't try to sell it. He's not trying to sell anybody anything. He just thinks that there should be a way where you can successfully implement all of this and also be able to feed yourself and live a normal life, not kill yourself at 50. So, I like his mentality because I've told you before I have a business degree right and so I do think about things from a sustainability perspective for myself as the person running this business. It's a business. But my business is the health of the soil that produces a product that then hopefully sustains me and the community. So, it has to be holistic. And sometimes we think like permaculture or something they don't think about that, they are focused on the soil, which is great, but you also have to be able to not only feed yourself but pay for

your electric bill and the property taxes and you know maybe take a vacation so you don't burn out now and again.

The Savory Institute is the one that kind of gives a guidelines on what that means but it's like: animal units on a given portion of land for a given time. And so, you're trying to impact the land in the right amount so that you get the right amount of fertilizer on that land the right amount of trampling without and then you get the animals off the land in time for the plants to recover fully. So it's like you wouldn't leave an animal on the same land for more than three days for example because if you start looking at plant biology like your grasses they want to start recovering after that fifth day and if you've still got somebody grazing it then it lengthens the recovery time for the roots. So, all that stuff and you don't want to graze it down too far because that also forces their recovery time to be longer than they have less leaves to photo synthesize nutrients down to the roots. So, you're trying to balance time and impact and nutrient placement like the poop... You call it DBTP: Distance between two piles.

I do have to [muck the barn] that in the wintertime. But we don't most of time, most of the year I don't have to do anything with it [manure]. It's already distributed across the land properly. The animals will do it for me. Yeah yeah yeah. But the winter is a little bit tougher.”

Willow: “I feel like you know like when my hands get in the soil, you can feel and see the life in it. I think we see, you know you can't see the microbes, but you can see the world, you can see all the little, insects and bugs and everything and you can see it. You can see it and you know for some reason I feel like I have a deep connection to it. Like I really need it. We're here, now, I feel like I'm here to take care of the land. Yeah and to make it healthy. You know, I bring in compost. I don't really do any of that biodynamic stuff, but you know I do it through composting. I don't till the land, but I've done it and I don't expect to do it again because I feel like it's really disruptive. So, I don't really know the structure of the soil structure, you know I can go from one side of my property to the other and I can see the difference in the soil. You know at the same time a lot of soil scientists can really see the difference. It always amazes me because it's not like the future is only two acres, but there's a huge difference in it, three of the two acres. So you're like, yeah, I mean you can see a difference between what I'm doing and what's down further and I think there's also just a natural difference between the two, like physically able to see the differences in the color of the soils and I know some of it's really rocky and great. And that's where I am and I wonder what is down near the creek. You can look and see if they see the difference in life, the darkness in the soil. It's

just like one side or the other, it is so different. It's only like a matter of yards. Right? It's like children, all from the same family, but you can't deal with them the same.”

Francesca: “... So, I spent a lot of time starting around May researching the best and yet most economical crop covers and whether at this point it would make any difference... So yeah there were lots of mistakes there were lots of Oh my God maybe I don't actually know how to grow anything successfully after...

... Like holy cow I can grow a whole ton of food in a very small fraction of an acre to where I feel like I need to jump ship from that model of doing things into a bigger tractor model of doing things. There is absolutely a need for that agriculture. But I feel like I saw how much food I could produce in a small space. And I know I could produce more now that I've gotten some of the rookie mistakes out of the way. And you know there's something to be said for growing in a way that doesn't require buying a sit on tractor that doesn't require a lot of high pressure irrigation needs and just stuff like as soon as you expand past an acre or so there's just a lot of needs for that size of land to make production possible and efficient. Now you're talking about investments in the five or six figures. To make all that work or you're just in an insane amount of debt all the time. I remember in managing that debt you know and so I feel like I don't need to be part of that ships doing this thing over there and that's fine but I don't need to be part of that. I'm a fool you know still going on a fraction of an acre and that's giving me the opportunity and the time to really think about how to nurture the soil because that is really important to me. And I haven't taken a full permaculture certificate course but I have taken like a little bits and pieces and again you know pillaged the library for resources and I just read a ton of stuff online and watched a ton of YouTube videos and listened to a whole bunch of podcasts. And so, the soil nurturance that come from that frame of mind is super important to me.

I do think that one of the bigger ways that we're destroying our human ecosystem in this world is the way that we treat soil and industrial agriculture. I think that a big aha moment for me a couple of years ago I think when I was still in that mental health job and so it was in the community garden world and stuff was finding Jeff Lawton who's sort of one of the gods of permaculture in terms of people who are highly knowledgeable and well regarded you know he said that larger industrial agriculture treats the soil it's more like mining than anything where we're just where we're leeching these resources in the form of soil nutrients and yanking them out of the soil and thinking about replenishing them, but not really in the same way that it (the soil) was when it was managing itself

and you know understanding over time more and more about how soil biology works. And how you know you can have soil that has the right levels of nitrogen and potassium and all of those other things but it can also be kind of dead soil at the same time where the microbial life and other life and stuff is just nonexistent and you can still grow stuff in that soil but over time it's not going to be healthy.

I just care a lot about environmental conservation. At least I can do in my tiny little postage stamp on the earth kind of way something a little in that way while also you know getting to support awesome nutrition and feed myself well and my kids well and the community connections that can come from chatting with people at farmer's markets chatting with other farmers you know the sort of I don't know even resource distribution stuff that can happen in cool ways, like "Oh you've got a lot of cow poop, man that sounds like fertilizer to me. Yes, you really want someone to come get rid of that. Cool." OK you know that kind of a thing way or you know wow you have a bunch of rabbits and you don't do anything with all that poop. You know and suddenly I'm that weird lady who's like all excited about poop but you know that poop is it's going to grow really pretty vegetables.

So, I was pretty aware that the established plot that has been used by my mom for the last 15 years or so has been managed in a way that is terrible to me in terms of not replenishing organic material. And you know she had thankfully haven't done it in a couple of years, but spraying weeds with Roundup and I realized I might I have to overhaul this in steps. And you know and who knows if I'll get to be around here for long enough to spend a few years doing that replenishing but at least I'm going to start now. But I wasn't sure that I could especially that time of year like January, February when people are still thinking about you know hiding inside from the terrible weather more so than in soil building which is understandable, I wasn't sure that I would be able to cobble together enough resources of like hey I want manure from you and I want like some leaves from you and I kept some straw from you and it was that straw spreading and you know I felt like people don't think it's unfortunate because that's at the time of year you should be thinking about that stuff is like fall winter and early spring but no one wants to think about that stuff at that time of year even if they have that resource sitting in their backyard.

So, what I did end up doing though was I ended up ordering a ton of compost. I mean several times a dump truck load of compost from a company in Albany and unfortunately ended up being kind of disappointed by it. It wasn't terrible but it wasn't great either. And I don't feel like I wasted my money but I feel like I could have put could have put a little bit more leg work in and gotten my

hands on some better resources that I feel like would have been better for the soil. I got soil testing done stuff like laboratory soil testing because I feel like what a lot of people do is you know I just need tons of nitrogen to my soil and everything will be green and happy right. But I knew that that wasn't the case and I knew I wanted to learn more and then maybe looking at a lab report I didn't understand and then forcing myself to go figure out how to understand it would be a good starting point which it was. So yeah. So, I tested my soil. I added a ton of compost I found out that my PH was actually awesome in my soil so I did not need to lime the heck out of it like a lot of people do in Oregon but I did need to gypsum the heck out of it because there were other things that were needed in the soil which probably saved me from a lot of other problems during my growing season by gypsum, so I gypsumed the heck out of it. If that's a word it works.

With the soil test we just see like your chemicals like the agent was like other parts to it. I wanted to test more aspects of it but I felt like it was expensive and I mean I look back on that now and it's like oh come on, it was like another 30 dollars. You know it's become a huge knowledge base but yeah, I mean I got like chemicals and organic matter percentage and PH and micro-nutrients. But there were some other tests I know that there were other testing services offered that I can't think of off the top of my head that you know would have been about twice as expensive to do like the full giant panel of stuff that maybe isn't necessary to do every year when you're growing.

But as an initial start off point in the mail once every few years would be wise to do this through, you do it through like AML laboratories which are like all over the place. I think the actual laboratory destination that it went to is up in the Portland area which is done because at that point I didn't know that I could just have the same testing done for like 20 bucks. So yeah, I also feel pretty strongly about working at least working toward a model of minimal tilling. I knew that I wanted to follow at least some version of the 30 inch wide raised beds like in the market gardener. And that you know dumping valuable compost and other nutrients into things that we're just gonna be pathways seemed dumb and so you might as well define where my growing spaces are gonna be in a way that you know is a good width to stand over and is a good width for a lot of cultivating and things like that. So, I thought you know. I don't need to reinvent the wheel. This is work for him. I'll try it too.”

Eugenie: “But one of our first things that we did when we moved here was to get in touch with the soil scientist. He's actually out of Corvallis, have you heard of Earth Fort. And so, Elaine Ingham and I don't know like you know who I'm talking about like the chick for soil at least in this area and

possibly all over. She seems like she is she and this this dude whose name I'm forgetting started the soil company and then she went on to do other things. Anyway, they have a great track record and the research that I did I wanted someone to come out here and just be able to like you know I wanted to talk soil.

I even told them on the phone I'm so excited to talk soil with you. Oh my gosh like let's do this. So, he came out here and he gave us some recommendations and one of the first things we did was to plant a cover crop. And what we tilled, which anyway we tilled pretty much everywhere just so we could get a cover crop in and just get the soil biology going. And then the deer came through and just ate all the cover crop.

So, I still see some like vetch and things coming through but I think it's reverted back to the native grasses for the most part.

Rosa: What did Earth Fort do when they came here?

Eugenie: So, he took a couple soil samples and that gave me a good sort of starting point. But I think the best thing that he did was sort of reassure me that this is a good soil because I was digging in it and it was very hard and I wasn't seeing a lot of worms or lots of other little creatures. And I know from some historical documents about the property that the bedrock is very close to the surface. There was some like various testing in the 60s that showed a very high water table and so shallow soil with a high water table.

And I was kind of like oh shit that does not sound ideal. And he came out here and he was like you're fine. This is great soil. He had some recommendations and we've got some products from him mostly to feed the soil biology and stimulate the soil biology and just keep it all going. So, we've applied that stuff a couple of times and as we've actually farmed on the other side, you're just seeing a ton of biological activity. There's worms everywhere. There's you know all kinds of stuff. And it's really cool to see. So anyway. Yes.

You can't even tell. I mean we didn't do much here. We pretty much did all there all around this barn here and all over here. We just weren't sure where we were going to start with the actual vegetable production because we still have some things to figure out. But I knew that I wanted to get a cover crop in.

And just start the ball rolling. So, I was you know it was probably not the wisest thing to till up the entire property and spend a ton on cover crop too, but it's what I thought was the best.

Here we are. So, this is where we did most of our growing this past year. Actually, it's better for, we got a few little caterpillar tunnels going that really helped and from what we can control the moisture obviously and then it keeps things quite a few degrees warmer.

The property itself was getting farmed on here before, so my understanding of the property is one family owned this property and like a ton of surrounding acreage. Since like the early 19th hundreds and they were doing I think, I believe it was pigs and horses for a long time, and then they parcel by parcel sold off everything except for this five acres...

But anyway, the soil here was so compacted it was crazy. My husband came in here with a plow and he could hardly even, I mean we have a small walk behind tractor. It was crazy it was knocking him all over the place. And so, we didn't even build raised beds, raised beds are our standards you know for all sorts of reasons but we couldn't even do that here. The soil was so compacted and I can only imagine it was I don't know from them driving all over this when they were ripping them out (orchard trees) or something but so this year we just, the crops did not grow well here. There was a shit ton of bind weed all up in here. That you know I think contributed to the problem but I think compaction had a lot to do with it. Yeah. So, we just threw down a ton of leaves and I even threw down some chicken feed bags, paper ones, you got mulch in here too. A week before the chickens came through here. It was nice. You know woodchip pathways and leaves over top. So, we put down this thick... (showing me the layers of leaves and bags) Oh here's a feed bag. Nice. Wow. Anyway, I came through here the broad forks couple days ago and it just went straight down. It was like totally different soil and you know it's got it all just be due to the soil biological activity down there doing their thing.

Rosa: When did you plow it?

Eugenie: Probably in May or June. was I was amazed... Oh this is a chicken. This is Mary. She's kind of blind. Hi Mary. So, she's the friendliest chicken that we have but I think it's because she isn't really sure what's going on. It seems to be getting quite a bit worse lately too. She'll walk straight into the pile here like all the time....

I knew enough to know that I would never ever spray anything. That was whether herbicide or pesticide. And I don't really, I remember when I was little my mom saying about the weed spray that it's poison, it isn't just poison it's poison. So, though she had it and she used it so I would never ever spray that stuff around anywhere I live or my kids live. But she knew enough to not you know sprayed across the kitchen counter which later college roommates would do and I would be horrified you know. (speaking about her garden back in the Bay). But you know I was tilling up my

raised beds I would till the shit out of them every year I wouldn't add any fallen leaves or know dead plant material. I thought you stripped that stuff off, that you want you want some nice bare soil. So, I did not know much... I don't remember where I first learned I don't know I'm not really sure where I first learned that you know it's alive underneath our feet you know. In fact, we're all relying on the health of that underfoot ecosystem for practically everything. I don't remember where I learned that. It certainly got cemented when I worked for a couple of environmental non-profits. And then actually I worked for School Garden projects. So, we went out to schools and taught kids how to grow food in their school gardens. And we leaned heavily on the soil biology and how it's all alive and how to foster that life and not kill it.

And then I think you know just taking on this endeavor I've read, researched a ton and I have this grand plan. So, I've been using the chicken poop and bedding for compost piles. But I'm just having trouble getting my ratios right. Like there's a period of the year where I have a ton of carbon and there's a period somewhere on with nice juicy greens, but I've yet to figure out how to get enough of both at the same time that I can build a nice compost pile. And I want them to be able to have a smaller pasture area so they [the chickens] can really work that soil and then move on. They eat a ton of feed so I'm hoping that's really going to cut our feed costs. But I feel like almost every plan that I make is kind of directed towards how is this going to help the soil. I feel like I'm looking at everything through that lens now like the leaves, that was a shit ton of work you know that is not sustainable for two people. We got our kids to help us but that was like wheelbarrow by wheelbarrow or bucket by bucket where my kids were concerned. We have a piece of shit wheelbarrow that I can't even use. We need a new wheelbarrow, it's just it's too heavy for me. So, I was doing bucket by bucket and you know as I could do it, we got to get the soil covered because I learned this the hard way. So, this, this makes me very uncomfortable and very sad that we have bare soil in here. And the reason that is like that is because we tried to push our season as far as possible so we were planting fall crops too late really in like August September-ish, and so then by the time we really face the fact that we couldn't that the deer had come and they had fucked everything up. By the time we finally came to that realization and clean everything out it was too late to plant a cover crop. So, then I'm like OK well we gotta put something on the soil maybe let's get some leaves you know, so we went out and got a shit ton of leaves. But then I was like wait a sec. If I put leaves in here right now then, the chickens have already completely messed up our raised beds right. I put leaves on top of that, then I cannot fix my raised beds and I really want raised beds.

And the soil has been compacted a little bit. So, I want to fix this all up but if I put leaves there, then those are gonna get all up in the way. And. Anyway so. So, we put the leaves over here and I've just been staring at this going. This is not good. I know that. But I don't know what to do at this point because I'm gonna need to put some crops in there probably in like a month or so as not enough time for leaves to decompose. We're certainly going to add some compost to the mix. But this to me, both of these tunnels is bare soil. And it's like troubles me deeply you know my husband doesn't quite, it's not quite there you know what I'm like.

what am I doing here. I know that the number one rule is not to have bare soil and yet I missed the boat on this one I missed the boat on that one. So anyway. Yet another huge learning experience that next year I'm going to have to have my ducks in a row too. I don't know what the plan is but. It troubles me. A lot. It makes me feel better that the birds are using it to dust bath and they're pooping all over it. So that's good. But. You know. I certainly do not have it all figured out...

So, I don't know this can be a great place for me to be doing fall and spring crops. You know maybe it's just a summertime. Anyway, I really liked how Permaculture comes at things from a more like zoomed out perspective. And then of course you know just the main points of it are to like take care of the land, take care of other people, not use so many resources and sort of stacking functions you know, so like make a moveable chicken house they could the, chickens could clear out, depending on where I put it, they could clear out a whole crop for me that I'm done with, scratch up the soil poop on it. So, they're cleaning up the soil and they're fertilizing it for me. You know that's what I'm all about having other people do my work for me if I can. But it just taught me so much about how to support the biology and sort of bring it all together. I'm still obviously learning it'll be a lifetime learning process but, I have enough knowledge to still be dangerous.”

Megan: The interview with Megan did not reveal explicit descriptions of soil care, but she did discuss how being a biodynamic farmer affected her relationship with her landowners to the point that she and her partner decided to leave so that they could practice their farming methods value systems. Interestingly, Biodynamic farming as she stated, “views the whole farm as a living organism.” Biodynamic is considered the most alternative of the alternative farming systems, because it not only considers all living entities on the farm, but it also takes into account cosmic influences from the solar system on the farm, it is a “spiritual-ethical-ecological” farming system. It is not too far out for most folks to consider planting seasonally and by certain moon cycles, but Biodynamics takes this much further...for example certain preparations are made using various

animal parts during certain cosmic events that will eventually be used as amendments on the farm. The most well-known of these is the cow manure preparation. Manure, along with certain herbs, are mixed together and put into certain kinds of cow horns then buried in the soil on the farm for a certain length of time. Once this time is complete, the manure is taken out and used on the farm as a basis of various kinds of spray that increase microbial life and soil health. This is just one such example from Biodynamic farming that uses various human and non-human care-work on the farm, for a complete list of Biodynamic preparations and the ideology behind the practices see Biodynamic's founder Rudolf Steiner's "Agriculture: Spiritual Foundations for the Renewal of Agriculture" 1924.

3. Thematic Section 3: Gendered Experiences within Farming and Knowledge Networks

Hannah: "I'm kind of a research addict so when I find a little thing, that nugget that I just go YouTube mad and start watching a billion videos and then it takes me on some other tangent I learn about bio-char and then I learn about just random things you just diverge on because "oh what's that" then you're on another tangent. So last spring was our first year doing rotational grazing and it was so amazing. There's something intrinsically satisfying about watching a cow go out on a fresh piece of grass and just be so happy and so calm and they're in their perfect element. Then when we're moving to a new piece of grass it's just like this constant gratification for myself. I think I was looking up regenerative agriculture and that there's pretty close ties usually with the mob grazing or intensive high density stock grazing there's different names for the same thing right. And then holistic management or savory institute or. It could go on like I started recently doing watching videos for very specific like farmers like good will Harris Hazen and white oaks pastures in the East Coast and he does all pasteurized animals and Joel Salatin. And David Brandt is a grain farmer but he uses cover cropping and no-till methodologies and then. Gabe Brown is another one that's like a really big and he is a grain farmer but he also uses livestock. And then he doesn't tail and he doesn't use chemicals and he does thousand these goes to last to do several thousand acres each. So, I was like if they can do it I can definitely do it I can do it on very tiny scale so big scale though. I tried to work with EcoTrust which proved completely useless. But I also reached out to, who else?..."

Oh, so we're both veterans and so I reached out to the farm veteran coalition and we ended up getting a little tiny grant to buy a stock trailer for the animals and for me. So, I have a business degree and so I know what I'm supposed to do. To some degree but I'm not necessarily a marketing person. And so, I was like OK how do we take this step beyond. Being a hobby farmer. And. So I create a website and starting part of the Oregon Pasture Network. And just started reaching out to. Organizations that are interested in what we're interested in and seeing if they can either teach us something or help us gain some legitimacy or you know so that you know people can trust that we're trying to do the right thing without having an organic certification or anything like that. So. But most of the actual learning is really pretty much been just. Online researching in my spare time or you know commandeering some of my intel hours to watching YouTube videos. And I took a marketing course. There's a lady who does raw milk but she's also like a little marketing guru and so I took her marketing course. And we worked with the seed Marion acre or Marion AG like when we should plant seeds.

Then I've tried to work with our farmer to ask questions and learn along the way you know. You know I don't want to discount him. He's got 40 years experience. He knows a lot of stuff. And so, I try to pick his brain when he was willing to. But he's not interested in transitioning to something different you know which is understandable he's been successful doing the way he's been doing it. But that was kind of also the forcing him. It was like I tried to say they have you ever heard of these people or this. And of course, that's meaningless coming from me.

No, he just farmed the land we bought it you know he had a lease. He had a lease on the land. So, and he's farms like several thousand acres in this valley. And so, he's big he's a big farmer here around here. Like most people know it's (name removed). (Name removed) farms it's just around the corner but. Super rough around the edges but big heart guy and we kind of butt heads because I'm all about kind of the more natural and I don't really want all your chemicals all over my land. How do we stop doing that? He's like "Hannah, you don't know nothing. I've been doing this a very long time. It works every year."

It works every so often. And his son is getting ready to take over and his daughter is taking over so I was very hopeful that maybe they might be interested in trying something new. I was sending a videos and stuff. I must've been the most terrible landlord or whatever you know. And they're accommodating because I'm their landlord but nothing was happening. So, I was like OK well I tried. Now, no you can't farm my land anymore. But my amount of land is like a tiny fraction of what they do. So, they don't even notice that they're not farming my land right. So, it's no big deal.

So finally, it was one of those things where just like OK well we're gonna do it ourselves. So, I can't convince you to try something new which I'm not terribly surprised by but now we've learned enough that I could pick the brain enough along the years and watched and I'd always ask questions like "oh you're liming the fields. What do you do that for? When do you do that and how much do you put on there?" And just like asking all the questions while he's doing it. So, learning that kind of stuff. But yeah that's it. No formal training just. Yet I did spend most of my childhood being around animals of some form so I feel like I, and also organic gardening some form, so I kind of have a pretty good base more than like a pure city kid. But beyond that, nothing formal."

Willow:

"...I started doing research as I put rows out there. So, then I started attending like the Small Farms conference and I started reading books. And I started doing I did like online OSU growing farmers. I did that. Oh, I did. One of the Master Gardeners program and I did a permaculture program. And I came across the Apprenticeship as well. I signed up for the beginning urban farmers program or BUFA and it was in Portland and it was with (name removed). Yeah, I got on the wait waitlists. And then she called me and she said I'm going with Oregon State University that the program isn't there anymore and that I'm starting my own program, I own small farm. She called me and I applied got a working interview. And I got in. And so, I did that and that's kind of like you get like the real life. That's when I kind of dived in, intensive. Like it was really intense. Yeah it was well worth it. I was just like you know I got up every morning and yeah, I was happy. You know it was like what we call you know and the team really develops into this like tight knit group and we work really well together. So. I wasn't really sure of that. You know I wasn't really sure because I was the oldest one there. And I wasn't sure how I was going to connect with people. And I kind of want to do. It. But yeah you know I ended up being a fabulous experience. Like I said I'm still in contact with people. Yeah. It was well worth the cost of it. And that just ended this year it ended November."

Francesca:

"I really started thinking more and more about agriculture. I ended up checking out a couple of books from the library that were sort of the romantic dreamy side of farming but that I you know read and appreciated and realized yeah. But you have to have a huge skill set in order to make this work successfully. I want to know that stuff or see where my knowledge gaps are so then that

winter, I started checking out more knowledge based books from the library. John in our time 30 days book the market gardener and. I had just come out. Curtis what's his face. I can't remember his ended up in Canada. I appreciate some of his material but he's way more urban than I ever want to be in terms of my agriculture...

So yeah that's just not an option and so I'm super thankful for friends of family farmers in their Oregon farm link Web site. I'm glad that that's a thing that even exists so again to know about the friends. I think at some point in my market gardening your neighbor vendor at a market was like hey you know are you involved well friends family farmers. And I was like. That sounds vaguely familiar from probably the farm conference or something but no I probably should know about that show that night.

...

So I started following them on social media and I went to a couple meet ups of theirs and actually going to one next week and then yeah and then and then got connected with Oregon farm linked Web site because you know I'm exactly the kind of person who hopefully can benefit from a Web site like that. And I'm so glad that that resource exists in Oregon because there's so many places where nothing like that exists but it's still it's still a difficult system and that a lot of the land listings on there.

...

I don't think I'm alone in my generation of just being kind of terrified about what the next 50 or so years is going to bring in terms of what this planet is gonna be like something about having a child makes you think more about that too. You created something that extends past your lifetime and what then that's going to look like for him and if he has children what that's going to look like my future grandchildren and it's terrifying and it makes you feel powerless like you can't do anything significant to make any big change in that way. And so, you know if I can't all by myself influence giant political movements that start caring more about that stuff.

...

I joined at some point in the season last year a Facebook group called market gardening success group that has tens of thousands of I took a peek at the membership because it was like 30 or 40 thousand people. Yeah like Curtis what's his face is in that group. I think John Martin actually made that group. But then Mike doesn't run it now. So yeah you know it's all interconnected in certain ways. Yeah. So there's this you know magical underground happening on Facebook of people being like so I'm getting kind of worried because I seeded this bad ten days ago and I still haven't seen any

seed emergence is that normal for this carrot variety or ism you know or did I screw something up in this. And. Like so many of that kind of thing that it's almost hard to keep up. I actually had unfollow that group at some point because it was just taking over my entire Facebook news feed especially at certain times of the year like when everyone's planting. And then when everyone's crying about pests and then when everyone's exhausted toward the end of the season and maybe thinks that they should never farm debt because it's September and they haven't stopped in four or five months and they kind of want to die but are still doing this for some reason there's like cycles to psychology of farmers in there somewhere too. But springtime joy and hopefulness. And then suddenly there's this community of like tens of thousands of people everywhere from the Pacific Northwest to places I've never heard of in the middle of nowhere in Europe to Australia to like just all over the place. You know people asking each other about which variety of passion fruit they're gonna be most successful with in this segment of Thailand. Like all over the place. And it's so fantastic but also overwhelming in that way of that's really cool and interesting and I could spend the rest of this afternoon reading up about all of that stuff but it has nothing to do with me because I can't grow passion for it here. That's part of a thing. There was a ton of relevant information and I ended up kind of running into a couple other people who I probably wouldn't have connected with here in the Willamette Valley who are also growers and who were also in that group and you know and then they're mentioning kind of general location based stuff and I'm like wait you know we live within 30 miles of each other. I want to know you.”

Eugenie:

“We feel so fortunate to be here and to have this opportunity. Yeah. It seems like as I talk to more and more farmers it seems like there's, from what I have gathered there seems to be two main avenues into farming. It's like you work for other farms, you don't make anything and then you have all this knowledge and experience but not the funds to start your own farm. Or you do work elsewhere, hopefully make enough money so that at some point you have enough money to buy it [a farm] but then you don't know really, you don't know what you're doing. You know. So, we're learning the hard way. And both those it's unfortunate those are both shitty ways to have to start such a difficult enterprise...

I got into that [the women farmers network] on the recommendation of the ladies from OSU extension. So when we first got this property and I had all these ideas of cover crop ,fencing, Swales, ponds ,you know native hedgerows all these things that I learned in permaculture and that I wanted

to apply but didn't know enough to like can I do this kind of a thing in September or am I looking at destroying my whole hill by erosion if I do that or will the cover crop set roots down quick enough to hold the hillside in place.

I don't know. I don't know. And also, what kind of equipment does one use to do that. Is out BCS not going to make it? Do we need to hire someone to come to it for us? Or could I, knowing nothing about a tractor, rent a tractor and plough it up? I did not know that was possible.

So, I called them, and poor, poor lady...they saw a live one I think from a mile away and she gave me answers like: "Well that depends. And farmers use all sorts of different ways of tilling the soil so it's hard to say what the ideal way would be. It's hard to say what would work for your situation if it's really sloped. That is a danger. Erosion is possible." So, what I was looking for is just could I rent a tiller. You could totally rent a tiller. That's what we ended up doing. Not a tiller, we rented a tractor. I can do that. No problem. I was looking for someone to be like yes you could probably do that. You could at least try it. And you know what you might fuck up your hillside, but I think you probably have a good pretty good chance if you get the cover cropping now.

I was just looking for sort of a little bit of guidance and just a little bit of you 'could probably do that.'

And unfortunately, I think they're lovely ladies, I'm still not quite sure what to go to them for because what I got back again and again until they stopped returning my emails I was: "Yeah. I don't know what to tell you, that people use all kinds of things." You know I had specific questions like if I were to rent something, what is the name of the tool that I am looking for...I'm looking for a tractor with a plow, a tiller, a...I don't know.

Like I really don't know. So that's what I thought. Anyway. So, I quickly learned, and will not forget, that maybe they're there for larger or more experienced people because they really were not there, they weren't for me. They're lovely ladies in person I've met them all they're wonderful people, I'm sure they have a ton of work and ignorant ass questions are always irritating. Right?

So anyway. Then I think one of the questions was answered with "you know you might want to hire someone to do that for you. And if so, this is a great group (the women's farmer network) that you might be able to send that out and just see what the group has to say." So, I did that and then I realized that probably the group is more beneficial. From a standpoint of just like community building and sort of a support network, if I can meet some of these people face to face then I could ask them like hey where do you get your native plants. You know who will do it wholesale but like five of these for those you know rather than 100. So. Yeah. Anyway, one of those ladies told me

about it and I found that overnight. Really helpful for just meeting some other folks and making you feel more comfortable in the group. And now I feel comfortable like just the other day I sent out an email to the group saying, 'Hey does anyone know where I can find some organically grown straw?' And while here we have two days later someone was like 'yes this is the guy.' And there it is. So, I would've never known that. And I just think that's great. You know what a wonderful thing. So as far as extension, I still don't know what they're for, my husband and I took the Small Farms class. We took that class. I would say that it was helpful. They have all kinds of publications that I find helpful. But yeah so maybe that's what there's more there for us, to write those publications and stuff. But I swear in all kinds of different locations they're been like "Hey call us with any questions or you know this person specializes in you these kinds of things so call them with those questions" and I tried..."

Meagan:

"...for pretty much the first year of (our child's) life because we were both just working on farm and keeping our costs down and we would kind of trade off like spending time with her. But obviously because of age I became the primary caretaker in terms of domestic and childcare at this point. We really do try to share that but because I've been nursing and also bonding just oftentimes some more of the [C]childcare will fall on me. And that was really interesting to experience as like a feminist and especially in the farming realm and recognizing that you know when I used to go out and get on the tractor and just go and you know we shared the same kind of labor tasks, but once (our child) came, it really did default to like well can you go do all the heavy machinery work and I'll go do the light work labor with (our child) and that has continued to play out.

But at this point, his suggestions work off farm has also just been on other farms and so that's been nice for him to be able to kind of continue that focus whereas my off farm labor has been exploring other ways of us becoming a whole financial picture. But yeah, I would say I'm the primary caretaker.

Yeah it kind of just follows on that and also what ended up happening as I was stepping away a little bit more to a more off farm work and to childcare is that (my partner) stepped into more responsibility and overall management. And so, then when I would slip in or if it was like "Do you take (our child) or do I take (our child)." It ended up making more sense that (my partner) would just do the work (on the farm) because he already was there and involved with it and engaged with it and it would be more time consuming to handle a task and then hand a child off.

Yeah I mean I think you know it's interesting now being a mother of a daughter and also somebody who really spent a lot of time doing gender studies and thinking about these dynamics and so on this question my first impulse is to feel a little uncomfortable when you start talking about what is it about women that are different. But there is there's something that I've found working with women in particular in the farming community where there tends to be, it's not related to values but it's a way of engaging with this work that is maternal that is nurturing that is community inspired.

And certainly, anybody within a network is going to self-select. So right you already have people entering and who are interested in probably finding community or in those kind of connections. But I find that the women farmers that are attracted to this kind of network tend to really value farming as a driver for building community and vice versa and also acknowledging that women tend to be running or working on small diverse farms with an emphasis on how the land is being stewarded in a way that you know, in a way that's often in tension with the business money driven like the bigger Agriculture scene.

And so I think there's also a very supportive energy that comes when you get women farmers together that's not to say that you don't get that with any, I mean I find my farming community male/female/whatever to be incredibly supportive, but that being said I think there is a level of support that is heightened with that. And also, yeah, I mean I also think as you know like I don't know I probably would still be farming full time if I didn't have a kid. And so, there's certain elements that can be shared with other women farmers who have had kids or had to transition out or trying to navigate that and also farming.

Divorces happen and if you're farming in relationship potentially with your partner or not or if you're not farming with your partner that's a huge pressure to put on a relationship. So, I think there's this nice accessibility of talking about those really personal things that I find within women farm networks that I don't necessarily feel as comfortable talking with a broader farmer gathering.

...

With some of the farmers, you notice like, it comes out, of course it's not everybody, but I feel like there is a sort of wear it on your sleeve value system around how a lot of women farmers choose to farm and why they make the decisions they make, and you know obviously there's conventional farmers out there that are spraying pesticides and you know I'm not. It's not necessarily just that, but it's I think it's this ability to kind of see things in a more whole system way and a lot of the farmers I engage with really think of themselves as a part of that system that they're working with. And it's not so much about domination and that also kind of goes for like oh it's really interesting because you

know you think about OK so there's a lot of women who are farming and are doing like hand like hand tools scale and so it's the question are they doing that versus like a bigger more mechanized operation because of some of the challenges women face with machines, like with gaining access to machinery or a comfort level or even when you go to buy a tractor and the discrimination you face and you know is there this tendency to operate more on that level because it is what's comfortable. Because that's what you're forced into or is it actually because at least what a lot of women farmers who are operating more on the hand tool scale will say is that it feels that that is what's best for the land and it's a different kind of a relationship but the way you're working, I don't know, is it because we're forced into it or is that just like a natural progression?

You know and also is there maybe just some kind of a justification for practices based on the fact that women farmers struggle to get equal pay. And you know even in larger farm operations and so when they're running their own business you know is there also a lot of women farmers I know have partners who are the off farm income and they're they run the farm. But then there's also this like gray area where sometimes that decision was made around the fact they were already being tied to the land or home because of children.

And so there becomes this almost like woman's role you know with the small scale farm where there's an off farm income that's funding it and the decision of who stays and oftentimes that decision can be income driven around you know who's going to be able to go and earn more money and there's that other layer of complexity.

But yeah I mean you just, I think that you know, I've been involved with women only like tractor workshops and I have been in mixed gender tractor workshops and it's just very evident when you have mixed gender workshops that men tend to dominate the learning environment and there's a whole lot of reasons for that. And I think that learning is compromised often for women in a group or it takes a very confident and you know personality to be able to kind of break-through that dominance. And so, I think just getting women together in any group to learn can be highly beneficial.

The women's retreat I think was I got to experience that. That was really evident especially conceptually care around the body. And my experience on other farms I've never come across that. I mean especially in groups. I mean mostly working men. There's no talk about the ergonomics of how to work your body only these things. So just different focuses. Yeah, I don't know if that comes up with mixed gender farming or whatever groups mixed gender groups. I find the whole the whole gender thing is fascinating to me and I also intellectually really struggle with wrapping my head

around any kind of conclusion related. But you know we're in such a system that we're operating under is powerful.

...

[in regards to “young women farmers” connecting with “older women farmers”]

Megan: I think there's community connections, I think. I mean like everything I think well like farmers it's so personality driven. I mean it's the kind of farm you're going to have the kind of practices the kind of farm you are is so much wrapped up in who you are as a person. And so, you know obviously I think there are older generation farmers who are very community driven who are very collaborative who you know want to share ideas and resources and those are more like me. Then there are those 'I'm not going to tell you my secret sauce or whatever' that would be although I think that's pretty rare in the small farm world. And so, I think that's I think that's where you start to find more differences as when you look at scale or kind of farming practices. I think when you're looking at you know and I think there's even difference between vegetable production and ranching. I mean you start to get a very different culture of farming that comes out of it. But I do think that there is but there's also this difference because you have this like eternal optimism with new farmers coming and a naivete that is necessary, otherwise you wouldn't do it. And I think whereas with seasoned farmers, there is you know sometimes not so much like a jaded attitude but like a sense of the challenges maybe being the challenge is being what they are. And then you have this tension when those aren't seen as challenges by beginner farmers or misalignment. I'm thinking of what the challenges will be or the realities.

But then you add another layer of complexity and you get first generation farmers. You get people who are coming and you know if you're talking about sort of generation but they're coming into farming in their 50s you know they're more like this naive fresh out of high school ready to hit the ground running or are retirement or gain or retirement. So, it's cultural personality and all of the background that would inform the primary farmer or are they, you know I mean that's the other thing.

So, some so we have some women in the farming network who are more on the homestead sort of scale and we really try to keep it working farms that are trying to make money and keep it. But that's just where we can't be exclusive. And it is interesting when those kind of worlds come together because it's a very different.

That's something I hadn't thought about especially with on network like those can. I don't to say competing but...Intention the intention is very different or the need. You know it's also, this is

when we were when we were exploring, learning we really wanted to go and spend time on a farm where it was like that dollar was gonna make or break them. Because the farming experiences that we had were wonderful and amazing but they were situations that were very well funded by off farm income. And so, we were curious as to what decisions were being made based on the ability to make it or break it, that need or because there was freedom to be more creative or to not worry about time analysis or whatever it might be...”

Appendix B: Survey Questionnaire, Answer Transcripts, and Figures from Results

Part 1: Questionnaire was distributed via online survey platform Qualtrics

(The following was downloaded and exported from Qualtrics.)

Study number: 8628

Study Title: Gold Dirt: New, Young Sustainable Farmer Women's Relationships with the Soil of Willamette Valley, Oregon

Principal Investigator and Advising Professor: Dr. Joan Gross, Oregon State University

Study Team Members: Rosa Michaels, Master Student, Applied Anthropology, Oregon State University.

Women Farmer's Survey

This 20 question survey should take 10-15 minutes based upon your answers.

Introduction

You are invited to voluntarily participate in this 20 question survey regarding land tenure, farming methods, programs and institutions that support farmers, and identity. The survey questions are based upon themes pulled from interviews with other small, beginning farmers in the Willamette Valley, Oregon.

Research Process

You may withdraw your participation at any time without repercussion. The data from the surveys will be analyzed for consensus with and diversion from the previous interviews. The data collected from you as part of the research, even if identifiers are removed, will not be used or distributed for future research studies.

If you are affiliated with OSU, and you provide identifiable information that includes experiences of sexual misconduct or harassment, the study team is required to report this information to the OSU Office of Equal Opportunity and Access (EOA), or the office responsible for Title IX reporting if another institutional affiliation is identified. All information regarding the incident will be divulged per the reporting requirements. If sufficient information is available to initiate an investigation, the individuals may be contacted by the appropriate institutional office regarding the incident.” **Note:** This applies only to participants affiliated with OSU.

Finally, because this survey is conducted via an online platform, the security and confidentiality of information collected from you online cannot be guaranteed.

Contact

If you have any questions or concerns, please contact the Primary Investigator Dr. Joan Gross at jgross@oregonstate.edu. or Rosa Michaels at michaero@oregonstate.edu or 937-763-9123.

Questions about the rights as a participant in this research can be directed to Human Research Protection Program, Institutional Review Board at Oregon State University at 541-737-8008 or irb@oregonstate.edu. The IRB is a group of people that reviews research studies to protect the rights of people involved with research.

Beginning of survey questions: Demographics

Q1 What is your age?

Q2 What is your gender identity?

Q3 Educational background?

Q4 Do you have children? If yes then, how has your experience being a parent influenced your experience as a farmer ?

The following questions are specific towards your **experience as a farmer.**

Q5 Did the 2008 financial crises affect your decision to start farming? If yes, how?

Q6 Did you have savings that helped you start farming?
(If other please use text-box below to provide brief description)

Yes (1)

No (2)

Other (Please describe below) (3)

Provide brief description if selected "Other" from previous question.

Q7 Is your farm (partially) supported by off-farm income?

Yes (1)

No (2)

Other (Please describe below) (3)

Provide brief description if selected "Other" from previous question.

Q8 How many years have you been a farmer?

not yet/"Pre-Farmer" (1)

less than 3 years (2)

3-5 years (3)

5-7 years (4)

7-10 years (5)

10+ years (6)

Q9 What “type” of farmer describes you? (you may mark multiple categories)

- Currently in an Apprenticeship/Internship (1)
- Employee on a farm owned and managed by someone else (2)
- Family land (3)
- Just beginning to research (4)
- Self-employed on informally leased land (5)
- Self-employed on rented land (6)
- Self-employed on owned land (7)
- Other (Please describe below) (8)

Q10 Provide brief description if selected "Other" from previous question.

Q11 What are your preferred farming methods? (you may mark multiple categories)

- Agroecological (1)
- Biodynamic (2)
- Conventional (3)
- Holtistic Management (4)
- Organic-Certified (5)
- Organic-Practicing (not certified) (6)
- Permaculture (7)
- Regenerative (8)
- Sustainable (9)
- Other (Please describe below) (10)

Provide brief description if selected "Other" from previous question.

Q12 Do you feel your gender/identity has affected your experience as a farmer? Please describe how.

Q13 How has your land tenure situation detracted from or enhanced your ability to farm with your preferred farming methods?

Q14 Briefly describe why and how you care for soil health and, or, soil microbiology.

Q15 Rank your motivations for farming with 1 being most motivating and 5 being least motivating.

- _____ Environmental Health (1)
- _____ Personal Health (2)
- _____ Family Health (3)
- _____ Community Health (4)
- _____ Other (Please briefly describe below) (5)

Q16 Provide brief description if selected "Other" from previous question.

Q17 When you need farming related information or advice, who do you **prefer** to go to first? (You can select as many or as few as you like- please rank your selection(s) starting with 1 being the most preferred option.)

- _____ Adelante Mujeres (1)
- _____ Beginning Farmer Rancher Development Program (2)
- _____ Farming friends or family (3)
- _____ Farm Service Agency (4)
- _____ Mudbone Grown (5)
- _____ Natural Resources Conservation Service (6)
- _____ Oregon Farm Link (7)
- _____ Oregon Tilth (8)
- _____ OSU Extension (9)
- _____ OSU Small Farms (10)
- _____ Rogue Farm Corp (11)
- _____ Women's Farmer Network (12)
- _____ Zenger Farm (13)
- _____ Other (Briefly describe below) (14)

Q18 Provide brief description if selected "Other" from previous question.

Q19 Why do you prefer to go to this (or these) group(s) before others?

Q20 (The 3 following questions regard this list.)

Have you contacted any of the following agencies, programs, or resources for information to help your farm enterprise?

- Agricultural Research Service (1)
- Economic Research Service (2)
- Farm Service Agency (3)
- Forest Service (4)
- Natural Resources Conservation Service/Soil Water Conservation District (5)
- Oregon State University (or any other University's) Extension (6)
- Risk Management Agency (7)
- Rural Development (8)
- Sustainable Agriculture Research & Education (9)

Q21 What has been your **best experience** working with or contacting the above programs or resources?

Q22 What has been your **worst experience** working with or contacting the above programs or resources?

Q23 Did you ever feel that you were discriminated against because of your gender while participating in or contacting those programs or resources? Briefly describe how.

Q24 Finally, is there anything else you would like to say about your experience as a farmer?

Part 2: Answers from Questionnaire in Order of Questions asked

1. **What is your age?** 3 Age: youngest 35, oldest 69, avg. 47.5

2. **Gender/identity:** All female, only one specifically said cis-gendered

3. Education Background:

1 had some college

11 had at least a BA

4 had Masters

1 Ph.D.

4. Do you have Children:

Yes: 8

No: 4

If yes, how has your experience being a parent influenced your experience as a farmer ?

Yes. Whew, becoming a mother has greatly reduced my ability to physically farm and be present in/on my farm. My partner and I attempted to keep going at our pre-parenthood pace with our farm and quickly realized in that first year postpartum that it was not sustainable. For me in particular, I could not manage it physically, emotionally, or logistically, due to an array of postpartum injuries and challenges. We've scaled back the farm operation as a result from 7 acres to 1 acre, and I have a full-time off farm job (that's also on a farm but entails more business management/office work and is not as physically demanding). Now that our little is 3 years old and starting pre-school we intend to slowly scale back up in a way that is more sustainable for us as individuals, for us as a couple, and for us as a family. Fingers crossed!

Yes. Hoped to pass along a successful farm operation but were unable to make it financially successful.

Yes. Family planning and starting a farm have been HARD. I'm actually in the middle of deciding whether to have more children or keep building the farm up. The farm made priority... now I work my booty off hard enough to be able to hire help before I'm out of my child bearing years.

Yes -- I am more patient

Yes. They were mostly grown when I started market farming full time.

Yes. motivation to grow clean, healthy local food.

Yes - My husband and I were both farming full time before our daughter, and now we have decided that we want to have one of us with a bit more time mid-season to dedicate towards her - as well as diversification of our income. My husband will continue to farm full time and I will be working an off farm job, and farming on a very part time basis.

Yes. Made it more important (access to healthy food, teaching children how to grow food and the effort involved). Made it challenging, at times, when kids and farm BOTH need more attention/time than I have.

5. Did the 2008 Financial Crises affect your decision making?

No- 11

BUT: No, but it did make it more difficult to direct market products.

No, it happened before we started.

YES- 1 Absolutely. I worked in construction and things got slow. I market farmed and worked off farm for a year before deciding to farm full time.

6. Did you have savings that helped you start farming?

Yes- 4

No- 4

Other -4

Answers for other:

we had about \$15K. Not enough to start a farm.

I have been farming from my twenty's and having money helps a lot.

We already had the land and the tractor when I started

Sale of my husband's house

7. Is your farm (partially) supported by off farm income:

Yes- 10

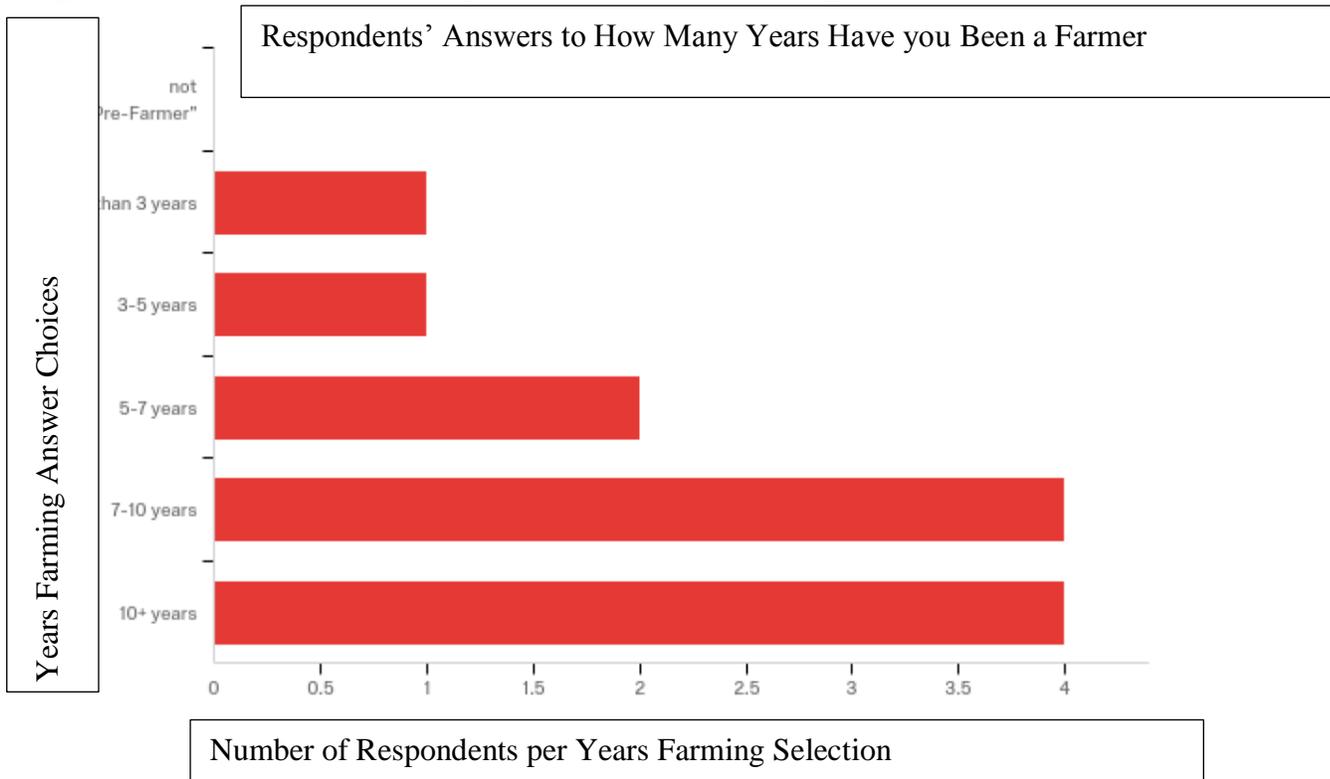
No-1

Other- 1

When I worked yes it did support my farm. As a retired person my pension supports my farm.

8. How many years have you been a farmer?

Figure 1: Respondents Indicating Number of Years Farming



9. What “type” of farmer describes you?

(Respondents could mark multiple categories, only 3 respondents chose “other,” with their response below.)

Figure 2: Survey Respondents Indicating what Type of Farmer they Identify as.

Type of Farmer:		
1	Currently in an Apprenticeship/Internship	0.00% 0
2	Employee on a farm owned and managed by someone else	7.14% 1
3	Family land	14.29% 2
4	Just beginning to research	0.00% 0
5	Self-employed on informally leased land	14.29% 2
6	Self-employed on rented land	21.43% 3
7	Self-employed on owned land	21.43% 3
8	Other (Please describe below)	21.43% 3

14

Number and Percent of Responses per Type

Other explanations:

1. Retired life makes farming self-employed on my own land
2. Managing a farm owned by someone else
3. Primarily a homestead farmer.

10. What are your preferred farming methods? (Respondents could select multiple selections)

Figure 3: Survey Respondents Indicating their Preferred Farming Methods

Preferred Farming Methods	Preferred Farming Methods Used by Respondents	
#		TABLEWIDGET.CHOICE_COUNT
1	Agroecological	5.13% 2
2	Biodynamic	5.13% 2
3	Conventional	2.56% 1
4	Holistic Management	17.95% 7
5	Organic-Certified	10.26% 4
6	Organic-Practicing (not certified)	15.38% 6
7	Permaculture	7.69% 3
8	Regenerative	17.95% 7
9	Sustainable	17.95% 7
10	Other (Please describe below)	0.00% 0
		39

Number and Percent of Responses per Farming Method

11. Do you feel your gender/identity has affected as a farmer?

Yes- 9

No- 3

Descriptive Answers:

1. definitely -- when dealing with equipment, fertilizer, and other suppliers
2. Yes. Primarily in a pre-developed biased, gendered skillset. Construction, building, engine maintenance are my weakest skillsets. Also, as does everyone, I view the world through my lens so of course.
3. Yes. Mostly it has been hard to be taken seriously by men running farm services as well as male dominated Hazelnut industry.
4. Yes. It has allowed me to connect and bond with other women farmers. It has sometimes made me feel like I need to catch up on learning things like mechanics, building, operating power tools/tractors.
5. Yes, mainly because of the impact of being a mother and the work life balance associated with having children.
6. It is an old boy's club when it comes to raising livestock-- hard to get into it
7. The biggest part is family planning/ building a business

8. Not in the sense of how others relate to me. But definitely yes in bringing a holistic vision and nurturing attitude to my farm activities and the way I relate to my animals. I recognize these as feminine qualities; however, I do realize that people of all gender affiliations can possess these qualities.

12. How has your land tenure situation detracted from or enhanced your ability to farm with your preferred farming methods?

1. we have been blessed to have a great land tenure situation. it has not affected farming methods.
2. Leased properties were difficult to manage as we saw fit because owners were conventional.
3. Detracted: we're investing thousands of dollars in land and infrastructure improvement but have no equity or security; landowner has unspoken/unwritten ideas about renting land cheaply that give them more sway/power over how land is used and infrastructure is maintained. Enhanced: we would never have been able to start farming or start a business without our landowner renting to us at submarket rates and allowing us lots of freedom to steer our own course.
4. We don't own pasture and cannot afford to buy any. So, we wanted to lease land for our farm dreams. The 1st pastures we leased worked well for us, and we got the farm up and running. Then the owner hit us with increased rent. We had to dissolve and vacate, as we couldn't find anything else in our price range. We relocated here to OR to be closer to family, and again try to get our farm up and running. We finally found some retirees that needed help managing their pasture. I'm hopeful that we are going to get on our feet this time, but not owning land and leasing can be intense/ worrisome.
5. Owning is much better I think, but never rented, always owned
6. I have always managed our acreage organically and had for almost twenty years before market farming it.
7. Lease from an "Emotional Vegetarian" = very limited animal pasturage.
8. We have had challenges aligning visions and justifying financial investments into land practices when the land owners did not share same values.
9. By owning the land, all of my money and work is presumably going towards my own investment in the land. However, the only way to recoup that investment is through an eventual sale of the farm.
10. We own our land.

13. Briefly describe why and how you care for soil health and, or, soil microbiology.

1. why: because we need healthy soil to keep doing what we're doing. how: extensive cover cropping, wide rotations, frequent fallow, macro & micro nutrient applications.
2. lots of leaf mulch, compost, minimal tillage
3. Why? Because soil is life and without good soil health, we do not have good crops. How? Annual soil tests and amendments if required. Annual compost and lyme application. Appropriately timed tillage, cultivation, etc., to limit soil disruption and increase microbiology, etc. Seasonal cover cropping and long field rotations.
4. We see the whole farm as one big living organism - the farmer included - this means that we recognize the impact of our farming work, as well as a responsibility to steward the land, enhancing its health and vitality for all that share it (including future generations). Soil health and healthy water is at the heart of all agriculture. Our practices aim to support balanced healthy farm systems - using health instead of poison to grow better crops.

**14. Answers for the Ranked question of Motivations for Beginning to Farm:
Figure 5: Survey Respondents Rank their Motivations to Begin Farming**

Ranked Motivations for Farming

#	AWA.FIELD	1	2	3	4	5	SIMPLETABLEWIDGET.TOTAL
1	Environmental Health	30.00% 3	10.00% 1	40.00% 4	10.00% 1	10.00% 1	10
2	Personal Health	27.27% 3	27.27% 3	18.18% 2	27.27% 3	0.00% 0	11
3	Family Health	8.33% 1	41.67% 5	8.33% 1	25.00% 3	16.67% 2	12
4	Community Health	16.67% 2	16.67% 2	25.00% 3	33.33% 4	8.33% 1	12
5	Other (Please briefly describe below)	16.67% 1	0.00% 0	0.00% 0	16.67% 1	66.67% 4	6

Number and Percentages of Responses per Ranking

Total selections per motivation.

Descriptive Other answers for Ranked motivations:

1. Aversion to other types of work
2. Rural Lifestyle
3. "Be the change you wish to see." I've been in agriculture my whole life; I'd like to see animal farming move to more humane practices.
4. Social Justice!! Corporations controlling the food supply= slavery
5. Other: Non-human life. Actually, I would rank all 5 of these as a "1"
6. Self sufficiency

**15. When you need farming related information or advice, who do you prefer to go to first?
(You can select as many or as few as you like- please rank your selection(s) starting with 1
being the most preferred option.)**

(14 options, most anyone choice received was 9)

- 9- Other
- 9- Farming Friends or Family
- 8- OSU Extension
- 8- OSU Small Farms
- 8- Women's Farmer Network
- 3- Oregon Tilth
- 2- Natural Resources and Conservation Service
- 2- Oregon Farm Link
- 2- Beginning Farmer Rancher Development Program
- 1- Farm Service Agency
- 1- Rogue Farm Corp
- 1- Zenger Farm
- 0- Adelante Mujeres
- 0- Mudbone Grown

Figure 6: Survey Respondents Rank Preferred Sources for Farm Related Advice & Information

Ranked preferred sources for farming information and/or advice:

Ranking from 1-14 (No one ranked all 14).

#	AWA.FIELD	1	2	3	4	5	6	7	
1	Adelante Mujeres	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00%	
2	Beginning Farmer Rancher Development Program	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	50.00%	
3	Farming friends or family	55.56% 5	22.22% 2	0.00% 0	0.00% 0	11.11% 1	11.11% 1	0.00%	
4	Farm Service Agency	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00%	
5	Mudbone Grown	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00%	
6	Natural Resources Conservation Service	0.00% 0	0.00% 0	50.00% 1	0.00% 0	0.00% 0	0.00% 0	50.00%	
7	Oregon Farm Link	0.00% 0	0.00% 0	0.00% 0	0.00% 0	50.00% 1	50.00% 1	0.00%	
8	Oregon Tilth	33.33% 1	33.33% 1	0.00% 0	0.00% 0	0.00% 0	0.00% 0	0.00%	
9	OSU Extension	25.00% 2	0.00% 0	37.50% 3	25.00% 2	0.00% 0	0.00% 0	0.00%	
10	OSU Small Farms	12.50% 1	25.00% 2	25.00% 2	25.00% 2	12.50% 1	0.00% 0	0.00%	
11	Rogue Farm Corp	0.00% 0	0.00% 0	100.00% 1	0.00% 0	0.00% 0	0.00% 0	0.00%	
12	Women's Farmer Network	0.00% 0	25.00% 2	25.00% 2	50.00% 4	0.00% 0	0.00% 0	0.00%	
13	Zenger Farm	0.00% 0	0.00% 0	0.00% 0	0.00% 0	100.00% 1	0.00% 0	0.00%	
14	Other (Briefly describe below)	Percentage Rate and Number of Times Selected of Ranking per Source.							

Answers for “Other” regarding information and advice sources:

1. Organic Seed Alliance
2. professional consultants - fertilizer, equipment, etc. dealers.
3. Ranch management consultants, ranching for profit
4. Dairy farmers, particularly sustainably-oriented ones, are a dying breed, so I contact the few mentors I have as well as strangers to get as much info and contacts as I can; this includes authors of books in my field. I also call and visit local farming friends and try to extrapolate their experiences to my situation if possible. I'm not sure what the difference between OSU Ext ofc and small farms is, but I use them as well.
5. Friends who farm & Facebook groups (ex: APPPA)
6. Google searches
7. Online resources and searches
8. Internet
9. Google

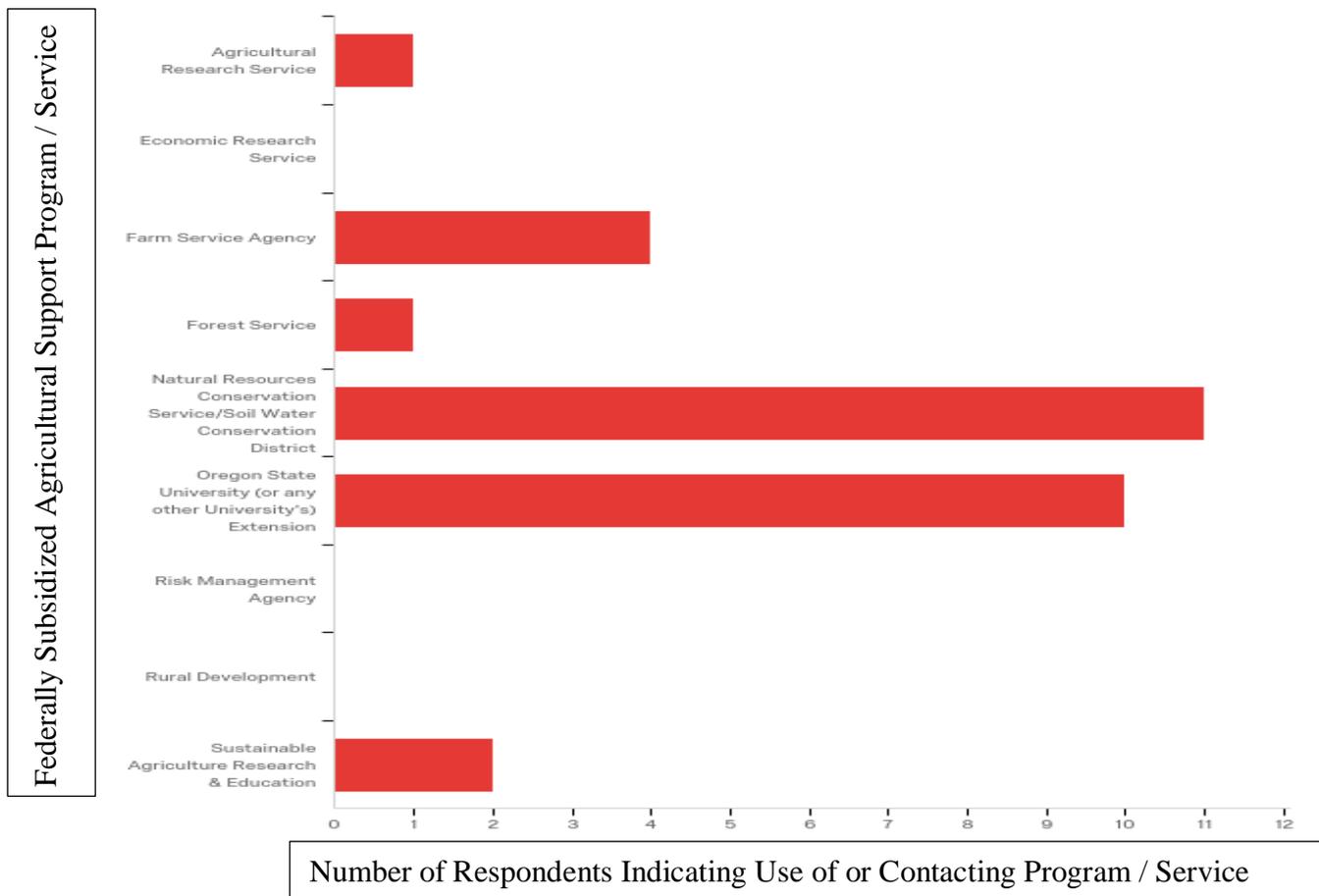
16. Why do you prefer to go to these groups before others: (maybe match these with answers?)

1. As specialty seed growers, we have unique growing conditions, etc. Generally speaking, not too many overarching agriculture agencies are helpful with the specifics I need answers on.
2. I have to follow Tilth's rules. Other farmers seem to know more than any of the resource groups.

3. OSU extension and ranch management consultants have been extremely helpful with research-based info.
4. I find reading books and person to person contact the most valuable (possibly only valuable) way to learn because there needs to be back and forth to apply to our situations.
5. I know a lot of them, and I can often make quick connections online while I'm working and check back later.
6. More comfortable with expertise, levels
7. Wide range of knowledge, fast
8. Other farmers in the area always know best
9. Because I have access to a wealth of both academic knowledge and practical experience at my fingertips, any time day or night.
10. Direct contact with farmers or organizations that can connect us to other farmers is most valuable.
11. OSU has little support for certified organic production. Internet is often better.
12. Ease of accessing information. Local information (what grows best in my area, etc.). Might get personal support (farm visit).

17. The 3 following questions regard this list. Have you contacted any of the following agencies, programs, or resources for information to help your farm enterprise?

Figure 7: Survey Respondents Indicate which Federally Subsidized Agricultural Support Program / Services they have Contacted and/or Used



18. What has been your best experience working with or contacting the above programs or resources?

1. OSU - the Small Farms programming is great, too many good experiences to mention. Field Cultivation day last August stands out.
2. Extension Service
3. None were very helpful
4. I've taken classes and gone to talks with OSU Extension. I liked them.
5. Extension and OSU most helpful.
6. High tunnel grants
7. EQIP program and NRCS
8. Last year I contacted OSU extension agent Melissa Fery regarding my desire to make and sell products from our small flock of dairy sheep. She put me in touch with the woman who runs the dairy program at OSU, who also gave me lots of resources and contacts to pursue in my research.
9. Best experience was not from above - but Rogue Farm Corps
10. Obtained an NRCS/EQIP grant in 2012. FSA has never offered anything helpful. OSU offers good info on hazelnuts, but none on organic production.
11. Having someone from the agency visit my farm and walk through with me - answering questions, offering resources and information.

19. What has been your worst experience working with or contacting the above programs or resources?

1. We spent/wasted lots of time with NRCS to get the ball rolling only to find out the program that applied to us was no longer available.
2. There is so much information it can be overwhelming on where to start.
3. Receiving suggestions that don't really meet the needs/goals of my farm (being given conventional solutions rather than regenerative/permaculture solutions).
4. None
5. No negative experiences to report
6. NRCS, because some of their program requirements were not suited to our local conditions
7. NRCS - too many hoops to jump through to get help. I gave up instead of using their program.
8. FSA in Lane County. My filbert orchard has been through 3 ice storms and 1 20" snow storm all causing major damage to orchard. FSA offers no crop damage assistance with 15% entire tree loss threshold.
9. Can't say that I've had a bad experience yet.
10. Being too small to do anything helpful

20. Did you ever feel that you were discriminated against because of your gender while participating in or contacting those programs or resources? Briefly describe how.

1. No - just too small of a farm
2. Being the ONLY female run hazelnut orchard and following certified organic practices has made me a known "rebel" in the Oregon Hazelnut industry. This industry continues to disregard the organic market.

3. Not that I was aware of. However, I will say that I was always happy to work with and talk with female employees for advice & support.

21. Finally, is there anything else you would like to say about your experience as a farmer?

1. Farming may be hard to get into if one is not raised in a farming family.
2. I encourage more help to new and beginning women farmers. This programs were not there in 2008 when I started. I worked the first half of my life in high-tech to afford farm land. Additionally, we need to be working on Public Farmland Trusts so land is handed between farmers at no cost. If we do not do this, private corporations/REITs are already out there buying up farm land which is WRONG!
3. I think agencies whose mission is to help farmers do a good job of not being sexist. But I've had repeated issues with contractors, dealers, etc. discriminating against me for being a woman. Never been overtly harassed, but definitely made to feel like a second class customer, having to wait a long time to get help, being quoted higher than market prices, etc. The Good Old' Boys club is real. And I hope it dies with the old guard.
4. Intergenerational land transfer is one of the biggest issues in OR ag now; if there could be more *active* interaction between the newer and older farmers to learn *all* aspects of experience, this would be great
5. It's a good life but hard to make a viable business on a small to medium sized farm. I think we would have needed thousands of acres to be viable.
6. More small farmers are essential for cultural sustainability and the future of the planet
7. My husband and I very much operate as a unit when it comes to sharing the work and envisioning the potential for our farm. His full-time off-farm income supports us financially right now as I research and develop on-farm income streams. In that sense, I am not an independent farm operator, but rather a partner.
8. The WWFN has been a great support for me. I went to a few local gatherings (better for me than state-wide) which were most helpful. Having an avenue to meet women farmers LOCALLY is most helpful in feeling emotionally supported and less isolated.