HHS Public Access

Author manuscript

J Agromedicine. Author manuscript; available in PMC 2024 January 11.

Published in final edited form as:

J Agromedicine. 2017 ; 22(1): 56–65. doi:10.1080/1059924X.2016.1251368.

"When This Breaks Down, It's Black Gold": Race and Gender in Agricultural Health and Safety

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Abstract

Farmers are growing older, and fewer new agriculturists are rising to take their place. Concurrently, women and minorities are entering agriculture at an increasing rate. These rates are particularly curious viewed in light of the racialized and gendered nature of agriculture. Slavery and agriculture share strong historical roots, with many male slaves performing agricultural labor. So then, why would African American women choose to engage in agriculture in any form? Participant observation and in-depth interviews with a group of African American women urban farmers in the southeastern United States were asked this question. Interviews with seven such women revealed their perception of self-sustainable small-scale agriculture as a departure from, not return to, slavery. The women drew metaphors between the Earth and femininity, believing their work to be uniquely feminine. Production of food for consumption and trade provides a source for community and healthy food amid urban poverty and the plight of food deserts. These data encourage agricultural health and safety professionals and researchers to tackle the health-promoting nature of such work, with the entrée of anthropology and other social sciences into the field. In many ways, these women portrayed small-scale food cultivation as an important component of, rather than a threat to, health and safety. Indeed, they viewed such labor as wholly health promoting. Their strong social connections provide a potential means for community-led dissemination of any relevant health and safety information.

Keywords

Gender; health; race; safety; urban agriculture

Farmers and farming practices are changing. National trends in farmer demographics reveal that the population is decreasing in number and increasing in age. Agriculture has been traditionally dominated by white males. The National Census of Agriculture conducted in 2007 and 2012 reported that 86% of principal operators were male and approximately 95% were white.[1,2] Farmers are also getting older, and a greater proportion of the farming population is reaching retirement age, with ongoing decreases in the proportion of farmers that have been farming 5 years or less.[1,2] In fact, the proportion of farmers belonging to this

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group of so-called “beginning farmers” experienced a decrease of 23.3% between 2007 and 2012.[1,2] These data suggest that fewer young traditional farmers are entering the profession to replace the aging population of the nation’s food producers.

However, new changes are being supported and funded at the national level. Noting this decline in the farming workforce, in 2009 the United States Department of Agriculture (USDA) dedicated $75 million to education, training, outreach, and mentoring programs for beginning farmers and ranchers.[3] An additional $20 million per year was appropriated for 2014–2018 ($100 million total).[3] The USDA defined a beginning farmer as one who has operated a farm or ranch for fewer than 10 years, does not own a farm or ranch larger than 30% of the average size farm in the country, and “substantially participates” in the operation of a farm.[4] Amidst these increases in funding, all categories of minority-operated farms increased between 2007 and 2012.[5] During the same time period, there was also a nominal increase in the number of women farmers.[6]

Many food producers are turning to urban gardening, which has been booming, increasing 17% between 2008 and 2013, so that 35% of households (42 million) garden for food.[7] Therefore, not only is the population of food producers growing more diverse, but the practices being employed challenge the existing commonly held notions of agriculture. Such practices include organic farming and different forms of small-scale intensive agriculture, both of which are particularly popular amongst women agriculturalists. Whether growing food on a large-scale, formal way or growing food for personal sustenance, these data suggest that the climate characterizing agriculture is changing in a big way, and a more diverse population with new ways of farming may be on the horizon.

As farmers and farming practices become more diverse, agricultural health and safety experts face the challenge of addressing the safety concerns of this increasingly varied population. Research in agricultural health and safety among ethnically and gender-diverse groups of emerging farmers and ranchers is scant. Although agriculture seems to exclude urban gardening, in fact, beginning in 1962, the Joint International Labour Organization/ World Health Organization (ILO/WHO) Committee on Occupational Health presciently defined agriculture as “all forms of activities connected with growing, harvesting and primary processing of all types of crops, with the breeding, raising and caring for animals, and with tending gardens and nurseries.”[7] The organizations define agriculture to include gardening and other means of food, fuel, and fiber production at any scale and not limited to rural environments.

Small-scale urban gardens as a study site permit unique questions to be posed regarding the benefits of agriculture. Physical health benefits have been documented with female and male farmers showing significantly lower cancer rates, particularly for colorectal and ovarian cancers.[8] Agricultural health and safety has much to gain from exploring the benefits of agriculture, either real or perceived. Participants in the current study did not earn an income from their agricultural work. They can abandon their agricultural activities with little to no financial impact; there is little economic impetus to participating. Through understanding their completely voluntary decision to undertake agricultural work, we can evaluate the rewards of such work free from economic imperative, or the most idealized

versions of these rewards. Yet, their reported benefits speak to the benefits of agriculture as an enterprise. In other words, there is something intrinsically appealing about agriculture as a day-to-day lifestyle apart from its being a commercial business. Undertaking small-scale urban agriculture isolates the benefits of such work apart from other variables. Perhaps understanding the meaning and benefits of agricultural labor will provide insight for addressing the loss of America's farmers.

In other words, the growth of urban gardening and other nontraditional forms of agriculture is fundamentally a question about the organization of work. Karl Marx argued that a part of capitalism is the continual separation of the worker from the object they are making.[9] A craftsman deeply attached to the object s/he creates often has a relationship with the object because the work occurs in their home. Thus, Marx argues for separation of the work environment from the home environment through active employment. Before capitalism, domestic and work lives were almost inseparable, such as on the family farm. In other professions, including dangerous ones such as mining and transportation, the separation is much clearer. In both instances, policy has effectively changed the health and safety standards of employees' work life. However, in the United States, because of the sanctity of the home, family farms are largely an exception; lawmakers would rather not govern the activities of home life. Given the proximity of work and home in agriculture, occupational health and safety policies have been less effective than in other industries.

Individuals can enter into agriculture for reasons other than or in addition to employment. Moreover, people enjoy agriculture and continue to work in agriculture in some cases because of the overlap between work and home. Thus, we should not necessarily expect health and safety designed around the separation of work and domestic lives to be effective in agriculture. To be effective, health and safety interventions must recognize the relationship between the person doing the work and the lifestyle surrounding the work.

The purpose of the current study is to describe diversity in the context of African American women, to argue for agricultural health and safety recommendations tailored to the populations they target. A secondary goal is to examine the benefits of agriculture to special populations. Few existing studies pose the question of what motivates African American women's participation or the meaning of their work. This answer can best be explored through ethnographic methods. Resultant in-depth interview data represent one such example wherein the results are presented in three themes: (1) the view amongst urban African American women that poor health equates to modern day slavery; (2) the natural world, its products and processes, as healthful due to their removal from biomedicine; and (3) these effects as unique to women. The women interviewed for this study show in detail their uniqueness and diversity, particularly from the white, male-dominated agricultural practices represented in industrial agriculture in rural environments. Their words and views of the world will help substantiate the value in tailoring agricultural health and safety recommendations to populations, including couching such risk in light of the perceived benefits of the work.

Recent studies have explored the psychological and biological benefits of gardening, including benefits to palliative end-of-life care.[10] Case-control studies reveal significant

improvement to self-esteem and mood as a result of gardening.[11-14] Additional demonstrated benefits of gardening include a reduction in stress and anxiety, promotion of mental well-being,[15-17] and additive benefits from combining physical activity and nature.[5,18,19] Further studies report that the quantity and quality of green space is associated with longevity and a decreased risk of mental health diagnoses,[20-23] and lower prevalence of asthma, morbidity, and cardiovascular disease risk.[18,20-22,24-27] Within the anthropological literature, several existing studies describe the perceived benefits of gardening.[28-30] Notably, Poulsen et al.[31] described the benefits of urban gardening at varying levels of the socioecological scale. At the individual level, participants emphasized the psychological benefits of gardening such as pride and a connection with nature. Benefits at the neighborhood level include building trusting relationships with neighbors and shared learning experiences. At the community level, gardeners valued the opportunity to reclaim city space by cleaning up degraded lots, creating gathering places and improving the food environment. These studies underscore the real and perceived benefits of gardening, but none tackle the meaning of these benefits for gardeners. Furthermore, none addressed the topic within agricultural health and safety.

In turn, existing research within agricultural health and safety on beginning farmers and ranchers is scant, and what exists dissects the policy and financial aspects of the movement.[32-35] Few studies explore African American farmers within agricultural health and safety.[36-40] Arcury conducted analyses on interviews and focus groups of southern African American farmers and found their knowledge of agricultural health and safety lacking.[37] Farmers routinely disregarded safety rules due to two reasons—one cultural (general recalcitrance) and the other practical (cost). Arcury's qualitative data are reflected in epidemiological statistics illustrating injury rates in African American farmworkers are 2.9 times higher compared with Caucasian and African American owners.[37] Women, like African Americans, also face special risks for certain poor health endpoints. Early studies indicated the risk of infertility was higher for farmworkers compared with workers in other industries.[41] Interestingly, farm residence did not alter the odds ratio, suggesting that the cause is not linked to farm exposure. Women tend to be injured less than men, but estimates for injury in women farmworkers vary from 11%–45%[42] to as low as 5%.[43] Women are particularly prone to lower extremity injuries, and foreign objects, falls, and overuse are the leading causes.[43] A full review of the research is outside the purview of the current study, but one lingering question suggested by increased rates of African American and women farmers is: why? What cultural factors contribute to their participation in agriculture?

Despite their rising demographics, little research has explored agriculturalists that are both women and African American. The trends of increasing numbers of minority and women farmers are strikingly curious. Historically, African Americans have a unique relationship to agriculture. Given their socioeconomic subjugation through history, the fact that today they are drawn to agriculture poses an interesting line of inquiry. What motivates African American women to enter into agriculture?

To answer this question, the first author utilized methods of participant observation and interviews through a rapid ethnographic approach with seven middle-aged or retired African American women involved in small-scale agriculture near Atlanta, Georgia. The women

were recruited through a partner under the pseudonym Shala. The first author was connected to Shala through a minigrant to conduct trainings for female African American farmers and gardeners on child agricultural safety awarded to her organization from the National Children's Center for Agricultural Health and Safety. Field notes and transcribed interviews were taken verbatim with the exception of one interview, which was not audio recorded. Five of the six recorded interviews proved most useful, and quotes from these five interviews were used for analysis. A list of interviewees is presented in Table 1.

The methods employed drew from rapid ethnographic assessment. The method's monikers include Rapid Assessment, Response, and Evaluation (RARE), Rapid Appraisal, or Rapid Assessment Procedures (RAP), among others.[44-46] The technique is rooted in three concepts: (1) a system perspective, (2) triangulation of data collection, and (3) iterative data collection and analysis.[44] The approach truncates the normally drawn out nature of full-scale ethnography to meet the demands of a compressed timeline. The approach has been used most notably in human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) research.[45,46] By incorporating multiple sources and different kinds of data, rapid ethnographic assessment proffers a means to arrive at a hypothesis to be tested in future research grounded in a population's actual behaviors and beliefs, like all ethnography. However, dissimilar to other ethnographic techniques, rapid ethnographic assessment cannot legitimize its findings in the researcher's imbedded, in-depth knowledge of the situation. Although rapid ethnographic assessment is a valid way to generate conclusions, its findings are often limited in scope compared with more traditional ethnographic methods. Here, the RAP method was utilized in line with its intention to understand very specifically the health and safety implications of urban gardening during a short, weeklong excursion alongside other fieldwork around agricultural health and safety.

My fieldwork was facilitated by Shala. Her father farms, and she continues the tradition in a small college city outside of Atlanta. The area is rural and very hilly. My car bobs and dodges around the landscape as I make the drive from the Atlanta airport to where I will meet Shala. It is filled with ups and downs, not unlike its history. The language on the city's tourism Web site similarly bobs and dodges its history of slavery, painting its early 19th century history as prosperous, based on its economy in cotton and railroads (i.e., slave labor). The Civil War is set as a turning point whereupon the fortunes of the city trended down with the gradual loss of free slave labor. Meanwhile, the university is heralded as assisting the city's propulsion into the 21st century.

Cotton and railroads no longer dot the hilly landscape as they once did. Shala and I enter Atlanta. People in the poorer sections mill at bus stops and saunter down sidewalks around gas stations with barred windows and houses with peeling paint. The sun is bright, but the day is cold for the south, a frigid sixty-something degrees. We arrive at a modest house just down from a busy intersection. Here is a most unlikely location for a lush garden, a hidden oasis amid urban sprawl. Shala and I meander around a garden marveling at the banana and habanero peppers as we wait for the garden's curator, Deb. We are there only briefly before I am beckoned across the street. The neighbor, an older African American woman with a vivacious attitude I will call Saundra, is having issues with her house. I walk in and am immediately hit with a musty, wet, stale odor mixed with the smell of rotten eggs. In harried

fashion, Saundra rushes about the house and produces a bag, which she says has only been in the house 1 day. Its off-white surface is dotted with spots of black mold. As we enter the kitchen, the smell of rotten eggs, indicative of a potential gas leak, gets stronger, and she demonstrates how her gas oven will not turn on. Shala and I convince Saundra to call the fire department's nonemergency line. The fire department pulls up after we leave. Around this time, Deb arrives and as we go around the back of Deb's house, I see another larger fire truck pull up across the street and unload huge fans. The garden, shaded by the large leaves of banana trees and surrounded by the bright pop of pink and red flowers, feels like a welcome reprieve from the trappings of the lower income housing surrounding it. Deb's vibrancy, accentuated by her strong Caribbean accent, and the colors in her garden belie the drama, a tableau of urban poverty, unfolding across the street. In fact, it is the smell of the flower-perfumed air of the garden in contrast to the gas leak across the street that I remember most.

I walk with Deb around her garden while we talk about her mission. She quickly boasts: "If I never see gas and if I never see Georgia Power, I could survive." With pride, she says she cooks her food, which she grows herself, over an outdoor fire. Her statement echoes a sentiment from Shala expressed over a cup of coffee my first morning in Georgia. Shala was raised on a farm and has continued her roots in agriculture into her life's work as an adult. She practices agriculture and advocates for its advancement in African American communities. It is an uphill battle, I understand. I have heard colloquially for years that African American men and women resist entrée into agriculture. Agriculture carries the cultural stigma associated with slavery. I ask why African American women want to get into agriculture given this stigma. She replies that slavery was ultimately about dependence. Growing your own food is about gaining independence. She says small agriculture is a way to keep your money from supporting industrial agriculture. Eating fruits and vegetables keeps people healthy and away from the biomedical system. The theme of poor health as slavery to a corporate-medical complex to which Shala alludes recurs throughout my interviews.

One woman expressed this theme particularly strongly. Corrine has her roots in agriculture and in Putnam County where her mother grew up on a farm. "I guess it's in my DNA," she says. Corinne prides herself on leading a natural life by growing much of her own food and trading what she grows for other rations. Gray hair dusts the top of her head, and her energy belies her age. She is a retired pharmacist. Despite her pharmacy training, she is vehemently anti-vaccine. During our nearly 2-hour interview in her living room, surrounded by books, she never loses gusto and rails against genetically modified foods, pharmaceuticals, biomedicine, and processed foods. "[When you garden,] you eat good, and you can what you want and you pretty much control, you know, whether or not you put anything in it like pesticides or fertilizer." She described what she calls the "medical pharmaceutical food insurance complex" that profits off ill health resulting from pesticide use, processed foods, and genetically modified crops. She explains, "If people were well, knew how to be well, that would destroy those industries right away." Here, biomedicine is portrayed as a form of systemic racism meant to profit off the exploitation and ill health of African Americans. She describes the historic system of sharecropping in similar terms. "I know there was sharecropping, especially down in the south where the white man had

the black people farming and he would take all of the profits … but, within the past 100 years so many farmers have been more or less put off of their land and you know, they buy the property and you know, put in condos or whatever." Like sharecropping, she describes the "medical pharmaceutical food insurance complex": "They want a profit and they are all kinda in it. I call it the medical pharmaceutical food—don't forget the food—and the insurance complex … they're gonna get their piece." She believes this system profits from exploiting the ill health of African Americans, largely in poor neighborhoods and food deserts. These people are often relegated to eating processed foods, genetically modified crops, and produce treated with pesticides, which she explains buttress the "medical pharmaceutical food insurance complex."

Corinne's claims may be exaggerated, but distrust in African American communities towards industrial agriculture and biomedicine is not solely the product of one woman's hyperbole. Chicken production dominates Georgia's agricultural commodities.[47] In the month before my fieldwork, the United States Occupational Safety and Health Administration (OSHA) released a memorandum to the poultry industry stating that the injury rate for poultry workers is more than 6 times the average for all US industries.[48] Although some US systems help protect an employee from undue financial loss resulting from an injury, if the injury or its sequelae is life-long, these systems are unlikely to protect the individual to the end of his/her natural life (e.g., workers' compensation, workers' rights laws). Particularly amid several studies showing worse health outcomes for African Americans,[49] the anxiety expressed by urban African American women regarding reliance on production agriculture that creates injury and the biomedical system that often fails them is supported by these data. As one woman I interviewed said, "But you know, I'd rather pay for it on the front end and be healthy than pay for it on the back end and be sick because that's what happens when you don't eat good food. You know, you're just sick." Small-scale food production is seen as a way out of the dependency on biomedicine created by poor health. As Shala originally stated and other interviewees echoed, they equate this dependency to modern day slavery. They see growing one's own food as an act of independence.

The natural world is in contrast to the often-racist systems urban African American women farmers feel they must navigate. Corrine describes processed foods as being "dead." "They [mothers] come home from work, they want something quick to fix for the family and so they go take something out the freezer and … it's dead. I mean, it's … it has no life in it." I ask her how life gets in the food. "Well that's what's put in it you know like growing it, it picks up the sunlight and all. That's just the growth process. You know whatever vegetables or fruit it is. And that life is in it." Another woman I will call Nancy, who operated a nonprofit in a predominately low-income African American food desert neighborhood, echoed a similar sentiment. "When stuff is all raggedy and stuff, you need to see some brightness. Color represents sunshine. You know what I'm saying? When you eat a good tomato, you taste the sunshine in that tomato. You taste the sunshine in that fruit." She describes the product, the food, as health promoting, in stark contrast to its "raggedy" environment. Corinne described her preference for chiropractors and herbalists because "they know what the earth produces that could help those conditions." These statements reflect the healing power perceived by these women in the products of home

gardening. To these women, both the product and the process are therapeutic. An older, retired woman I will call Linda, who gardens in her retirement community's garden plot, focused on the experience of small-scale food production. She came to Atlanta from the East Coast several years ago. "It gets to the point where I have to come outside. Even though I'm allergic to about 5 or 6 different trees since I've been down here, 5 or 6 different grasses, but once I come outside that air outside kinda revives me." In addition to the products of small-scale agriculture producing improved health and independence from traditional biomedicine, the process of such work also produces perceived health benefits. Here, the natural world, the garden—working in it, and consuming the products of agricultural labor—is cast as beneficial for being divorced from biomedicine and mainstream white society. In other words, the independence fostered through small-scale gardening is in-and-of-itself therapeutic in its separateness from white society.

However, such benefits were often portrayed as unique to women. Nancy, the woman operating the nonprofit, felt strongly that women share a unique connection to the Earth.

> "I think that women in general have that same affinity or allegiance to the earth because women are the Earth, representative of the Earth as far as those that bring forth life … So I think that as women, naturally, there's a capacity and the propensity that women in general are more nurturing. Therefore, they nurture the Earth. You know what I'm saying? They have more of an allegiance to the Earth. They feel the Earth. They're delighted by the Earth. They're inspired by the Earth. They're healed by the Earth."

The connection Nancy describes runs deeper. She describes how women nurture the Earth and the Earth in turn nurtures women in an almost symbiotic relationship between femininity and the Earth. Corinne used strikingly similar terms. "With women being the so called nurturers, the one who is nurturing … you know, they are concerned about what goes into their family's mouths, especially their kids. So, it's connected; it's connecting because the big mother, Earth! I think women tend to you know, that resonates with women." I remarked that Deb talked about her pumpkins like they were her babies. Deb emphatically confirmed this. "Didn't she say the right word? Did she see the picture of me with the pumpkin over my shoulder? It is my baby!"

However, men were not perceived to have the same connection. Within minutes of meeting Nancy and touring her property, she pointed out a dying plant. She blamed the young men who worked for her restoring the property. Nancy purchases properties and repurposes neglected plots of land for community gardens. "Men are always cutting shit. They cut that and they killed it." At another spot, Nancy pointed out where bees had once built a hive. "Yeah, but [the bees] stopped coming here because the young men had killed it off, see they cut it down." Corinne stated her answer more definitively. "Males are incomplete when they come [into being], as we know, and they never catch up if you ask me. It's so much they don't get." The Earth as a metaphor for women and existing in a symbiotic relationship with women made the products and processes of food production all the more therapeutic. Rather than reinforcing traditional gender norms, the women I spoke with felt empowered by their work through women's unique ability to experience the benefits. The uniquely feminine ability to appreciate the labor set the boundaries of the work; men were inherently seen as

incapable of fully appreciating the labor. Limiting the benefits to women only fostered a sense of community and cohesiveness in the group.

Interwoven into these narratives is the importance of place in experiences of health. Put another way, people, like plants, have roots. Roots ground the plant in the soil and provide nutrients. Similarly, the women I spoke with described gardening as a way of taking control of their home and property, connecting them to their neighborhoods as they traded their goods, and building solidarity with other women gardeners. They strongly believed the food they produced was healthier and promoted their independence from the biomedical system by which they felt betrayed. These women strongly believe in the potential of their geography to repair their circumstances. Their hope remains, despite the 2008 housing crisis that still ripples here. Atlanta was one of the top five hardest hit cities, with 35% of homeowners still underwater in their mortgages, a rate tied with Las Vegas' rate for highest in the country.[50] Deb explained the importance of composting for the health of her plants and the health they provided her. "I grow in nothing but wood chips and peeling skins and rotten leaves and nothing more than that. I never fertilize or add anything to the soil because when this breaks down, it's black gold." Although Deb is commenting on composting, her words are a powerful metaphor for the hope black women find for their health and community in gardening. Amidst the urban break down of inner city America, small-scale agriculture—its products and processes—provides a golden opportunity for a sense of place and stability that might otherwise prove elusive.

In conclusion, increasing numbers of women and African Americans are entering agriculture amid a funding boom to begin to replace aging farmers. However, little research exists on the cultural aspects of the beginning farmer and rancher movement, particularly regarding the benefits, motivations, and meaning of agricultural work in populations experiencing an uncharacteristic swell of participation, such as African Americans, women, or urban gardeners; much of the research within agricultural health and safety has focused on commercial agriculture and injury rates. Ironically, many new beginning farmers and ranchers are entering the business in pursuit of certain benefits. Understanding these benefits can be important for tailoring safety interventions to real life and protecting the quality of life for agriculturalists. In fact, women who associated farming with hazards were significantly likely to display depressive symptoms.[51] These data correlate an overemphasis on the risks of farming without giving credence to the benefits to a perception that farming promotes depression and poor quality of life. Thus, the current study tackles small-scale urban agriculture to understand the work when it is performed free from the daily stresses of business. These benefits are not universal, but must be understood in context, which here refers to a racialized and gendered context. The benefits include growing your own food source as a path towards independence, and the products and processes cast as healing by being divorced from mainstream white society. These benefits are perceived as unique to women and so help build a sense of community cohesiveness.

Within the racialized and gendered nature through which urban agriculture is performed, small-scale, community-based agriculture among low-income African American communities can be seen as a departure from, not a return to, the dependence characterized by slavery. In many ways, the women I spoke with portrayed small-scale food cultivation

as an important component of, rather than a threat to, health and safety. In accordance with these perceptions, the health-promoting role of this type of small-scale agriculture should be properly contextualized in and supported by its racialized and gendered context. For example, injury avoidance could be discussed as another way to avoid biomedicine. The women viewed the Earth and gardening as a metaphor for their own bodies and health. Thus, safety and health interventions could be couched as healthful to the person and, in turn, a healthful gardening practice.

Increasing numbers of women and racial minorities should encourage exploration of health and safety (defined broadly) among these groups.[52] A deep and grounded understanding of the cultural motivations for participating in the work (discovered through ethnography) can help uncover new ways of discussing agricultural health and safety given the unique characteristics of each group, as the current work has demonstrated.[53]

New, diverse groups of agriculturalists demands rethinking the bounds of agricultural health and safety research to include the benefits of such work. The charge to incorporate African American and women into agricultural research includes describing their unique motivations, practices, and beliefs, as well as the risks of their work so that safety interventions can be targeted to their logic and practices.

Acknowledgments

The authors wish to acknowledge the assistance of Dr. Rachel Stankowski of the Marshfield Clinic Research Foundation's Office of Scientific Writing for editing and providing feedback on the final manuscript.

Funding

Funding for this project was provided by the National Children's Center for Rural and Agricultural Health and Safety (NIOSH 2U54OH009568).

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Table 1.

Summary of interviewees.

Shala	Gatekeeper/driver, works for nonprofit supporting African American women in agriculture, parents in agriculture
Deb	From Caribbean, grew up surrounded by agriculture, retired, grows food to trade/sell
Corrine	Parents grew up on a farm in rural Georgia, retired pharmacist
Nancy	Middle-aged, operates a nonprofit to renovate abandoned houses in food deserts for community gardens
Linda	Lives in retirement community, originally from the East Coast