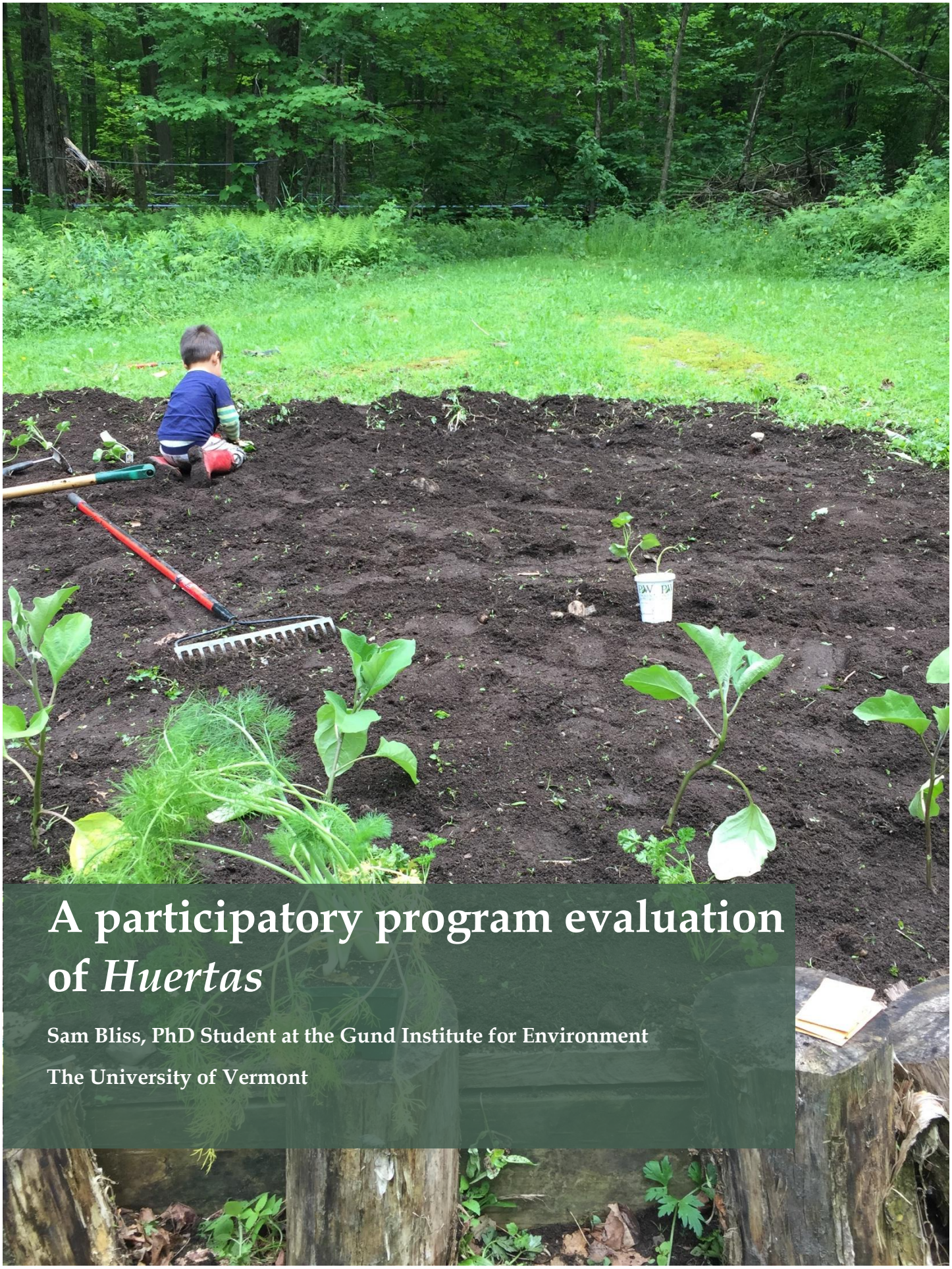

A participatory program evaluation of *Huertas*

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Executive Summary

- Dairy workers in Vermont struggle to access fresh and culturally important foods.
- Huertas supports dairy workers and their families to plant and maintain kitchen gardens.
- A researcher interviewed people from 13 of 27 participating households in 2018 to evaluate the program.
- Nearly every household reported eating more varied and fresh food, and spending more time outdoors, because of having a garden.
- Participants value their gardens because they provide fresh, chemical-free food, including crops like tomatillos and varieties of chili peppers that are difficult to find in Vermont.
- Huertas gardeners also described the enjoyment and empowerment that gardening gives them.
- Gardens strengthen participants' *relationships* with their food, their environments, and their families and housemates.
- Difficulties arise when gardeners lack the necessities for successful gardening such as a sunny space, knowledge about plants, the right materials, or enough free time.
- The primary recommendation from this evaluation is that Huertas interns visit some participants, with tools and materials, to work together in their gardens during the summer.
- If Huertas hires an intern with gardening experience, these visits can address participants' possible lack of time, knowledge, skills, and materials all at once.

Figure 1 Jalapeno peppers ripening

Introduction

Mexican and Central American dairy farmworkers in Vermont do some of the most difficult and least appreciated work involved in providing milk, cheese, yogurt, and other market products. Yet they struggle to access fresh and culturally important foods through the market. They live mainly in rural isolation. Many are undocumented, and risk arrest or deportation when they venture beyond their homes and the farms where they work. Some receive groceries purchased for them every week or two by their employer, who typically doubles as landlord. Most also buy food from merchants who deliver familiar Mexican products from Boston or New York City in vans. Eighteen percent are food insecure as estimated by standard methods based on income, compared to 13 percent of the whole Vermont population. In-depth interviews with 30 migrant dairy workers and 10 service providers suggest that in reality at least half of farmworker households experience challenges accessing food.[i]

Huertas is a program that supports these dairy workers and their families in Vermont to plant and maintain kitchen gardens of vegetables, herbs, and flowers.[ii] These gardens provide Huertas participants with those fresh and familiar foods that they have trouble accessing otherwise. They also may provide psychological, social, and spiritual benefits—for instance through increased time spent outdoors, shared homegrown meals, or relationships caring for plants, respectively. In general, gardens are good for the health of gardeners, ecosystems, and the global environment.[iii] One objective of this program evaluation was to learn about the benefits that home gardens produce for Huertas participants.

The questions guiding this participatory program evaluation of Huertas were, "How is the program going for its participants?" and "How can it be improved?" Interviews provided a platform for participants to express their opinions of Huertas, share stories, offer feedback, and make suggestions for changing the project. With the guidance of Dr. Teresa Mares and Naomi Wolcott-MacCausland, the co-leaders of the project, the program evaluation intern—a PhD student at the University of Vermont and the author of this report—set out to evaluate the program in a way that centered the voices and experiences of participants.

Figure 2 Tomatillos and tomatoes

Methods

In 2018, 27 households participated in Huertas. In October and November, interviews were conducted with 13 of these households—ten at home and three over the phone. Multiple household members were present in three of the interviews, so the data represent 16 different Huertas participants. This was as many Huertas gardeners as were willing and able to participate. Of the 14 respondents to questions about gardening, three were participating in Huertas for the first time that year. The longest-running participants interviewed were two households that were finishing up their fifth-year gardening with the help of the Huertas program. The average (both mean and median) interviewee had three years of Huertas experience. Nine of the 14 respondents (64%) had grown vegetables in Mexico before migrating to the United States.

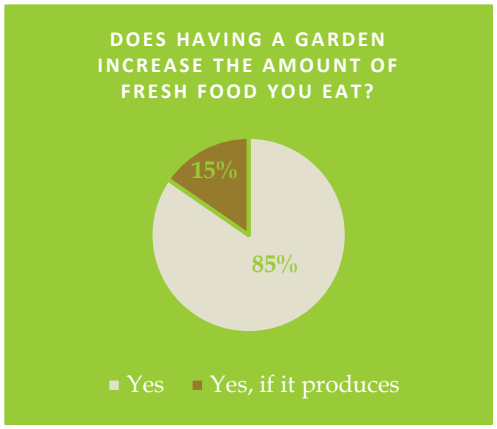
The interview protocol included open- and closed-ended questions. The first few questions were open-ended questions about their experiences gardening. Then they were asked about their relationship with Huertas: how many years they had participated, what types of support they had received, and what has improved or worsened about the program. After that, they responded to closed-ended questions about whether their garden provided specific benefits—whether it increased the amount of fresh food they ate, the variety of foods they ate, or the time they spent outdoors. Participants were asked if they share, sell, or conserve any of what they harvest. To end the interview, they were asked whether they would want some possible types of assistance that Huertas might provide to further support the cultivation, maintenance, and enjoyment of the gardens, such as providing greater access to tools or instruction on preparing certain vegetables. The interviews did not stick entirely to scripted questions; instead participants had the chance to guide the conversation.

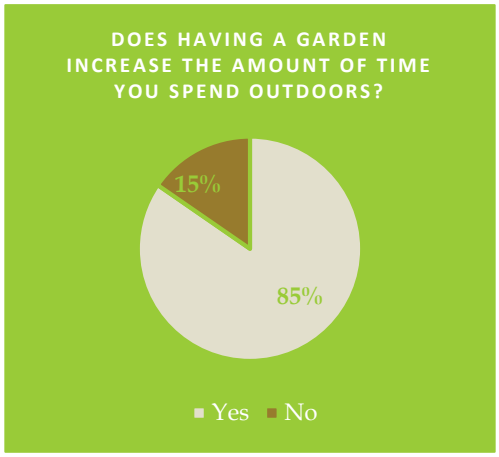
This report summarizes participants' responses to the interview questions. The sample was not representative of all Huertas participants, since it was determined according to who agreed to be interviewed and could successfully schedule a time to do so. The results presented are illustrative, not statistically rigorous. The program evaluation intern also analyzed the interview transcripts qualitatively to construct a grounded theory of the relationship between Huertas gardeners and their gardens. The conceptual diagram of this substantive theory is reproduced and briefly described below.[iv] All interviews and analysis were conducted in Spanish. The author has translated quotes and results to English for this report. Participants' names are pseudonyms.

Figure 3 Trunk full of donated starts

Results

Overall, Huertas participants, with the assistance of the program, are successfully providing themselves fresh food and other benefits. When asked how their gardens went that summer, the word "*bien*"—meaning "well" or "fine"—was part of the immediate response in 12 of the 13 interviews. Eleven households reported that having a garden increased the quantity of fresh food they consumed, and the other two said that it depends on how much the garden produces. In 10 of 13 households, having a garden augments the variety of foods consumed. In 11, at least one household member reported spending more time outdoors than they otherwise would have because of the garden. Seven participants said at some point in the interview, unprompted by a specific question, that their gardens were saving money for them by reducing spending on food.





Food from the garden was worth more than its monetary value to participants, though. No one reported selling any of their produce. "Going out to harvest fresh vegetables isn't the same as getting them at the store, where they were harvested a while ago," said Elena. Given the hypothetical option between the support from Huertas to maintain a garden and a weekly delivery of fresh produce, 9 of 15 respondents said they would prefer the garden. Of the six who chose the (hypothetical) weekly box of produce instead of the garden, five qualified this response: two respondents said it was because they lacked time to garden successfully; one had just moved and had no place to garden lined up for next year; one wanted the delivery only "if it's just as fresh" as produce from the garden; and one household opted for the delivery just because their garden was in a shady area and produced little.

Why do Huertas participants place more value on produce from their gardens than equivalent produce from elsewhere? Food from right outside one's home has several advantages. It was described positively as fresh by five participants and chemical-free by three. A few participants spoke specifically to the security and confidence it gave them to feed

"What we plant, what we harvest, we know that we were the ones doing the maintenance and what we're eating is fresh"- Francisco, Huertas Participant

themselves and their loved ones with food that, because they grew it themselves, they knew everything about how it was grown. Francisco explains: "What we plant, what we harvest, we know that we were the ones doing the maintainence and that what we're eating is fresh."

One man said he liked that in his little garden in Vermont, unlike the large monocultures back home in Mexico, there were "various things that you can harvest at the same time … an assortment of things." When asked what they like about having a garden, many participants simply responded with lists of crops. The most mentioned crops were chili peppers (9 occurrences in 13 total lists) and tomatillos (6 occurrences)—both crops that are available sparingly and in different varieties in Vermont compared to in Mexico. (Radishes were also mentioned 6 times.) Access to culturally important foods is another benefit of having a home garden.

Figure 4 Habanero peppers

Gardening itself brings joy to Huertas participants. Some participants expressed that being with the plants, watching them grow, watering them, and caring for the garden relieved stress and was inherently pleasurable. Others said they liked the beauty of their gardens. A few participants described the independence and competence that they felt from maintaining their own garden for the first time. This applies mostly to people who grew up in the city and are only now, with the help of Huertas and in some cases after a few years with other more experienced gardeners, growing on their own. Others spoke of their process of learning and gaining skills.

Several participants stressed that tasks related to the garden, from planting to tending to harvesting and cooking meals, are done jointly and bring togetherness. Food from the garden is shared within all 13 households interviewed. Seven reported sharing food outside the home, too—with friends, other workers on the farm, or at other farms. No one said they sold garden produce, though outside of these program evaluation interviews several Huertas participants have

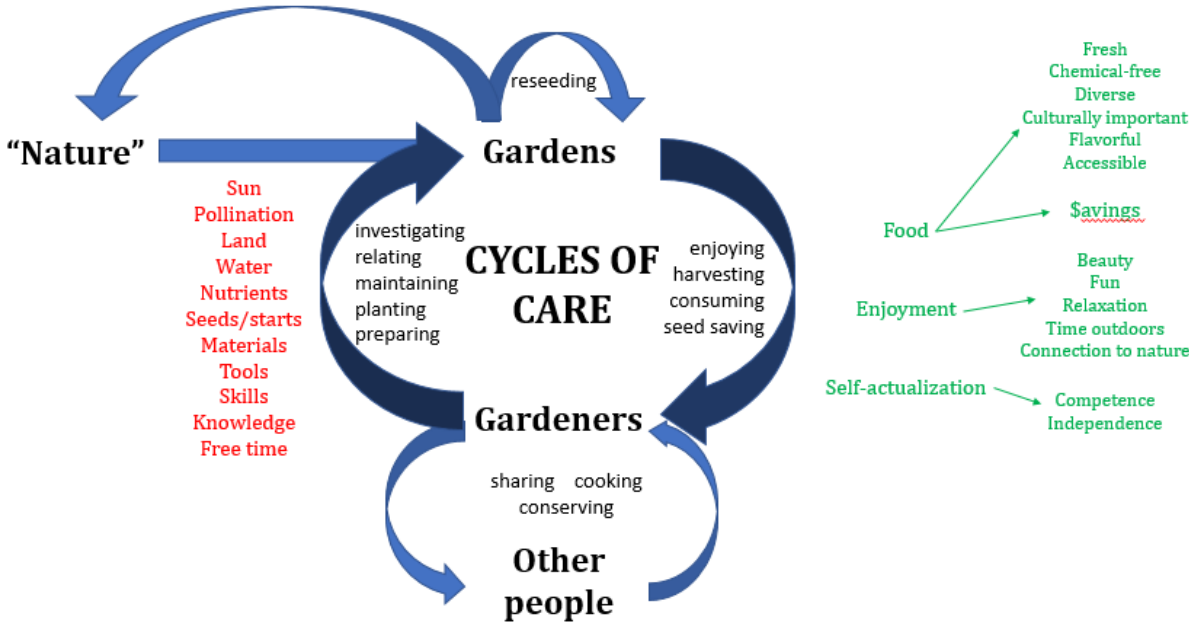
expressed interest in growing vegetables for market. Food from the garden was preserved by freezing in five households; participants canned tomatoes in two households; and one participant reported drying herbs. In the five households where no food preservation methods were reported, it was because there was no need to conserve the harvest: together, household members always consume everything the garden produces. Overall, participants value their gardens because they strengthen relationships with their food, their environments, and their families and housemates.

Figure 5 Huertas interns and participants prepping a garden

> "*My kids eat the little cherry tomatoes. They eat them as soon as they pick them.*"
> *-María, Huertas Participant*

Participants spoke of gardening as a cycle through which people care for gardens and gardens care for people. They used the verb *dar*, "to give," to describe what the garden produces. Gardens give food to gardeners, who pass on the gift of food to others and reciprocate to the garden by tending it. Gardens also provide enjoyment and empowerment. The benefits interviewees described are in green in the "cycles of care" diagram below.

The necessary conditions for successful gardening are in red. Participants need adequate time, tools, water, land, sun, connections, infrastructure, nutrients, and gardening skills and knowledge. Ten had positive things to say about the support they get from Huertas in attaining these prerequisites for gardening. Nearly all the difficulties that participants described had to do with lacking one or more of these necessities: not enough time because of the work schedule; the property is too shaded; the well runs nearly dry in the summer; missing knowledge about plants and their pests.



"Cycles of care" in Huertas participants' gardens.

Nobody said they lacked seeds or starts, but eight participants expressed appreciation for the seeds and starts from Huertas. This is not surprising: Huertas is more than anything else a distributor of the biological resources necessary to plant a garden every spring. Likewise, very few households have gardening tools but neither was the lack of tools mentioned spontaneously as a barrier to successful gardening, probably because most use Huertas's tools a couple times a year and many also have access to tools from the farms at which they work.

> *"I work 12 hours. I don't have much time. During my break, I go out to tend the plants. I have to be there giving them water, removing pests."*
> *-Lorenzo, Huertas Participant*

On the other hand, several participants reported that caring for their garden was difficult because they do too many hours of physical labor, often during the best times of day for gardening. Waking hours off have to be spent preparing and eating food, not growing it. This is also unsurprising, and Huertas cannot control how much its participants must work. But Huertas does provide some labor help to many participants to prepare and plant their garden plots—work about which six participants explicitly expressed positive sentiments

Figure 6 Crops sprouting

Recommendations

Other than one group of men asking for fertilizer, nobody made specific requests of Huertas. Yet the lack of time might be an area for Huertas to focus on. What if interns were to work in participants' gardens with them during the summer? They could bring tools and materials that gardeners might lack. These small work parties could easily replace or combine with the cooking lessons for which Huertas interns have been paying visits to participants in recent summers. An educational component could be incorporated into garden-work visits if Huertas hires an intern with some degree of expertise. Several participants from cities expressed knowledge about gardening as one of the requirements they lack. A few also cited gardening knowledge as one of the benefits of their interactions with Huertas, while another had learned about gardening from Youtube.

Every interviewee said "yes" to the idea of organizing knowledge exchanges among participants, which was suggested near the end of each interview. While such an event should be a medium-term goal of Huertas, providing more help with the work of gardening to the participants who request it when offered is the easiest way to support a few participants who have struggled to keep up. Like any strategy to address participants' lack of the requirements for successful gardening, this will jumpstart their cycles of care.

Figure 7 Participants planting

Conclusion

The following words are a translation of what Sara, a Huertas participant, said in her interview:

We know how the garden grew, what we put on it, whether we used fertilizer or not, and we feel more confident about eating what it will produce. One can feel the difference, eating what you harvest and comparing. The flavor is different.

This was my first garden and I enjoyed it a lot with my daughter, because she helped us. And when all the plants were ready, she sat down in the middle of the garden and started to pour soil all over herself, just like she'd seen us put soil on the plant starts so that they were nice and covered. Well, she sat down—I think she imagined she was a plant because she started to cover herself in dirt. And I was going to say, "Don't do that," but I saw that she was enjoying it so much that I said, "It's alright, throw dirt on yourself." ... She was planting herself. I liked that.

[i] Teresa M. Mares, *Life on the Other Border, Farmworkers and Food Justice in Vermont* (Berkeley: University of California Press, 2019).

[ii] Teresa M. Mares, Naomi Wolcott-MacCausland, and Jessie Mazar, "Cultivating Food Sovereignty Where There are Few Choices" (Food Sovereignty: A critical dialogue, Yale University, New Haven, Connecticut: Transnational Institute, 2013), https://www.tni.org/my/node/1121.

[iii] Masashi Soga, Kevin J. Gaston, and Yuichi Yamaura, "Gardening Is Beneficial for Health: A Meta-Analysis," *Preventive Medicine Reports* 5 (March 1, 2017): 92–99; Jane Clatworthy, Joe Hinds, and Paul M. Camic, "Gardening as a Mental Health Intervention: A Review," *Mental Health Review Journal*, November 29, 2013; Gea Galluzzi, Pablo Eyzaguirre, and Valeria Negri, "Home Gardens: Neglected Hotspots of Agro-Biodiversity and Cultural Diversity," *Biodiversity and Conservation* 19, no. 13 (December 1, 2010): 3635–54; Laura Calvet-Mir, Erik Gómez-Baggethun, and Victoria Reyes-García, "Beyond Food Production: Ecosystem Services Provided by Home Gardens. A Case Study in Vall Fosca, Catalan Pyrenees, Northeastern Spain," *Ecological Economics* 74 (February 1, 2012): 153–60; John R. Taylor et al., "Ecosystem Services and Tradeoffs in the Home Food Gardens of African American, Chinese-Origin and Mexican-Origin Households in Chicago, IL," *Renewable Agriculture and Food Systems* 32, no. 1 (February 2017): 69–86; David A. Cleveland et al., "The Potential for Urban Household Vegetable Gardens to Reduce Greenhouse Gas Emissions," *Landscape and Urban Planning* 157 (January 1, 2017): 365–74.

[iv] The analysis through which this grounded theory was generated will be published in a scientific journal article that will form part of the author's doctoral dissertation.