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The Gardens Nearby

A narrative podcast exploring soil contamination and community gardening in Burlington, VT

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Food Systems, University of Vermont

April 2022

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In partial fulfillment of the requirement for the degree of Master of Science in Food Systems

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Abstract

The city of Burlington, Vermont (Burlington) is home to the Burlington Area Community Gardens (BACG), a program of the Burlington Parks and Recreation Department. This program has a 50-year legacy in the Burlington community and today comprises 14 garden sites that serve over 1,400 people. Within the framework of food sovereignty, community gardens are valuable, multi-functional spaces that positively benefit residents and neighborhoods alike. However, planting gardens in reclaimed urban spaces may come with food safety concerns. Like other cities that have an industrial heritage, some of Burlington's urban areas have soils with high levels of toxic heavy metals and other contaminants.

This project seeks to understand the impact soil contamination has had on the development and implementation of community gardens across Burlington. The project also explores the continued implication of soil contamination and the resulting complexities of gardening in an urban area. Through interviews with 13 gardeners and key figures within the gardening community, a three-part narrative podcast is woven together. *The Gardens Nearby* details how soil contamination fits into a larger problem of available open space for community gardens, the resiliency of residents and neighborhoods faced with soil contamination, and the resounding benefits these community gardens have for individuals and communities alike. Lastly, this project intends to utilize place-based change methodology and adult learning theory to inspire and engage residents to support the development and prioritization of community gardens across Burlington.

Acknowledgements

A huge thank you to my advisor Simon Jorgenson for believing in my vision for this project and providing the support to shepherd it into fruition. Additional thanks to my other committee members Teresa Mares and Luis Vivanco who offered insight and guidance during critical moments throughout this process. Thank you to Andy Kolovos, Kate Haughey, and Mary Wesley of the Vermont Folklife Center whose expertise, connections, and technical resources enabled this project to flourish in exciting ways. Immense gratitude as well to the podcast participants who offered up their time and stories to make this project possible. And lastly, thank you to my friends and family who have provided encouragement and emotional support through the entirety of the process, I couldn't have done this without you.

Background

The city of Burlington, VT (Burlington) has a dynamic 50-year history of community gardening. Over the years gardens have come and gone due to fluctuations in gardener interest, availability of resources, and increased development pressure. Presently, the Burlington Area Community Garden (BACG) program is managed by the Burlington Parks, Recreation, and Waterfront Department. The program comprises 14 garden sites across the greater Burlington area serving over 1,400 people. Sites range from small neighborhood plots to larger sites with multiple acres of available garden spaces.

Since its founding, Burlington has been home to various industries including the rail industry, wood product manufacturing, and coal gasification (to name a few). Prior to the 1970's a lack of regulation around toxins and contaminants from these industries, as well as contaminants from smaller businesses and households, contributed to the presence of heavy metals and a broad array of chemicals left within the city's soil (History | City of Burlington, n.d.). Planting gardens in reclaimed urban spaces can therefore often come with food safety concerns (Dyg et al., 2019). In cities across the country, heavy metal-polluted sites have also been strongly associated with areas populated by low-income families, newcomers, and racial minorities (Montano-Lopez & Biswas, 2021; Evan & Kantrowitz, 2002; Morrison et al., 2014; Pasetto et al., 2019). In addition to physical health concerns, the experience of living in an environmentally contaminated community has been shown to have mental and social health implications (Barnes et al., 2005).

The purpose of this project was multifold. Through archival research, oral histories, and semi-structured interviews a narrative podcast investigating the effects that soil contamination has had on the community gardens and gardeners within Burlington was produced. This podcast

also aims to serve as an educational and engagement tool to raise awareness of contaminants within the urban soils of Burlington and show that from a food sovereignty lens these gardens are important multi-functional spaces within the local food system. A community tabling event was held as well, to raise awareness on soil contaminants within the larger Burlington gardener community and provide an alternative learning experience through the distribution of educational fliers. The following questions guided this research project:

- 1) How has soil contamination historically impacted the development of community gardens in Burlington?
- 2) How does soil contamination impact the residents' ability to grow food in these gardens, particularly for those that are members of underrepresented social communities?
- 3) How can this information be used to engage the Burlington public around these issues?

Guiding Frameworks, Theories, and Methodologies

Food Sovereignty

“Neoliberalism is an ongoing social, political, and economic process premised on valorizing individuality and reducing society to capitalist exchange” (Sbicca, 2018, p. 23). This way of thinking has led to food being perceived as a privilege as opposed to a right resulting in disparities in food access. The food sovereignty movement emerged from La Via Campesina in the mid-1990’s beginning as a social movement of peasants, farmworkers, and small producers to challenge the global neoliberal food regime (Sachs & Patel-Campillo, 2014). The movement is situated as a critical alternative to the concept of food security and is broadly defined as the right of local peoples to control their own food systems including markets, ecological resources, food cultures, and production modes (Wittman et al., 2010). The very notion of community gardens stands in opposition to the neoliberal paradigm – instead cultivating a relationship to food that stems from ideals of collectivism and sharing.

The community gardens represent material resistance to modernist notions of urban space, private property, and the appropriate place of food production (Trauger, 2017). Their ability to serve as educational spaces for sharing of knowledge, skills, and resources lowers barriers to entry for members of the community that would otherwise be unable to benefit from the opportunities available (Tornaghi, 2016). While not exclusive, these spaces are often organized and governed by community members, and both support and promote the notion of local control and food sovereignty.

This framework not only includes the right to grow food, but to produce food that is safe and nutritious. Community gardens also provide residents with the open space to grow culturally meaningful and appropriate foods. For minority communities that have a restricted food choice

due to the limited availability of ethnically diverse produce found within Vermont grocery stores (Lafond, 2018), community gardens enable access to nutritious, fresh, culturally important crops they may not be able to find elsewhere. The empowerment and possibility that can be found in having space to grow one's own food has led to a growing body of research suggesting parallels between urban agricultural practices including community gardening and the food justice and food sovereignty movements (Agyeman & McEntee, 2014; Heynen et al., 2012; Toraghi, 2016; Sbicca, 2012).

Within the framework of food sovereignty, community gardens are valuable multi-functional attributes to the local food system. Therefore, education on their societal value to promote their expanded access is relevant and necessary.

Place Based Change and Education for Sustainability

In *The Art of Community* by Charles Vogel (2016) he shares that “Stories are the most powerful way we humans learn. Every community, like every person, is full of stories”. Engaging with both the geographical history of the community gardens, as well as the social history they were born out of, provides a deeper understanding for what these places mean within the community today (Massey, 1995). This is relevant for place-based change efforts that require a deepened understanding of the neighborhood and community as contexts for the effects such places have on the people who reside within them (Nowell et al., 2006). The Education for Sustainability (EFS) framework takes this understanding of place-based change a step further and suggests Knowledge of Place + Understanding of Interdependence + Sense of Self Efficacy = Engaged Residents Creating Sustainable Communities (Ostensen et al., 2022).

Research shows that a necessary precondition for challenging harmful stereotypes, building community across difference, and facilitating empathy is connection on emotional and visceral levels through artistic forms of representation (Leavy, 2015, p. 27). While it could be argued that podcasts are not art, the diversity of stories included in *The Gardens Nearby* trigger similar emotional and visceral reactions and facilitate the awareness of interdependence. Specific calls to action within the podcast are also meant to encourage self-efficacy to inspire engagement around issues of soil contamination and bring awareness to the importance that community gardens have for food sovereignty and the local food system.

Oral History as Feminist Methodology

I am committed to the inclusion of voices that may not have been historically prioritized and seek to address power imbalances present in academic research. Accordingly, this project used oral history as a feminist methodological approach to incorporate women and other marginalized voices into history. “The recognition of Oral History as a feminist methodology emerged with the knowledge that women’s lives have been obscured and excluded from traditional accounts of historical events” (Agarwal, 2020). In places like Vermont that have a settler colonial history, this exclusion of histories goes beyond women, necessitating the inclusion of a diversity of voices to complicate and question the dominant historical narrative. Oral history is situated within a theoretical framework that embraces aurality, emphasizes people's lived experiences and perspectives, and relies on shared authority in the creation of content, with an aim of democratizing the historical record (Blufson, 2014).

Feminist participatory methodology focuses specific attention to power-loaded research relationships, subverting historically harmful power dynamics through a process of knowledge co-production (Caretta and Riaño, 2016). While oral histories are initiated by the researcher, a

mutually beneficial relationship and sense of rapport is often necessary to allow for knowledge sharing. This collaborative relationship is characterized by what Michael Frisch calls “a shared authority” (Frisch, 1990, p. xxii). “Critical to the whole field of oral history is the belief that the opinions of the narrators are important, and their reasons for believing and acting as they do are central to the information-gathering process” (Blofson, 2014). The practice of oral history has the potential to break down existing hierarchical power relations as the practice provides validation to lived experiences and stories that may not otherwise be a part of the dominant historical narrative.

Creating space for individuals to not only take ownership over their story but recognize their experience as part of a larger picture helps to build self-efficacy as well as to understand interdependence - key aspects of the EFS formula for building engaged communities. A deeper sense of belonging is also fostered through the oral history process as individuals reflect on their own personal histories entwined with memories of place (Nowell et al., 2006). People's lived experiences, histories, and perspectives are validated through the collection and dissemination of oral history. As such, these stories are necessary to build compassion, foster connection, and inspire change.

Podcasting as Knowledge Mobilization

As explained by Anderson and McLachlin (2016), knowledge mobilization is political. The dominant knowledge and labor systems in academia reflect and even aggravate already deeply uneven relations of power, knowledge, and privilege. Traditional knowledge transfer systems privilege elite esoteric writing styles focused on research that has commercial potential rather than with and for knowledge users (Anderson & McLachlin, 2016). Establishing

knowledge dissemination pathways that can promote transformational research to wider communities is crucial in working towards changing these dynamics.

Podcasts are uniquely able to communicate visceral elements of data through speakers' voices. Kinkade et al. (2020) argue that the presentation of audio data from diverse and multiple voices (researchers and research participants) also creates opportunities for polyvocality and democratic dialogue. As a communication format, podcasts are often conversational in style and freely available - making them more widely accessible to non-academic audiences (Kinkade et al., 2020). Additionally, the audio format allows for a more flexible media experience allowing residents to listen while doing other tasks including gardening.

Adult Learning Theory

National statistics on the demographics of podcast listeners have found that they are generally between the ages of 12-54 (Buzzsprout, 2023). Though this range skews toward younger audiences, listeners can largely be considered adult learners. Like any other age group, creating educational material for adults requires understanding the developmental needs of the audience.

Knowles (1984) who coined the term *Andragogy*, meaning "adult education," theorized that there are six main characteristics of adult learners. Relevant to this project is the understanding that adult learning is self-directed/autonomous and is both goal-oriented and relevancy-oriented. Podcasts inherently allow listeners to engage with the material in their own time and are therefore a great self-directed format for many adult learners. Through engagement with the Education for Sustainability framework, *The Gardens Nearby* is also situated to promote goal and relevancy-oriented learning.

Constructive-developmental theory makes two broad claims about adult learners: Adults continually work to make sense of their experiences (constructive), and the ways that adults make sense of their world can change and grow more complex over time (developmental) (Fahey and Ippolito, 2014). Using this theory, Fahey and Ippolito (2014) characterize two typical adult learning practices, instrumental and socializing:

An **instrumental learning** practice is built on precise solutions, specific processes, and unambiguous answers... “Instrumental knowers orient toward following rules and feel supported when others provide specific advice and explicit procedures so that they can accomplish their goals” (Drago-Severson, 2008).

A **socializing learning** practice is not dependent on straightforward, concrete answers. Instead, a socializing learning practice focuses on learning about the perspectives of others and taking them into account as part of systematic experimentation with different teaching practices.

To create deliverables that work for learners on both ends of the spectrum, a solution-oriented document was produced for the community event. The document includes precise actions and information speaking to those with an instrumental learning practice. The narrative form of podcasting can be described as a socializing learning practice because it allows listeners to come to their own conjectures from the story being told. In creating deliverables that touch on both learning practices, this project sought to increase accessibility to the materials and meet the needs of a diversity of adult learners.

Methods

Archival/ Historical Research

For the first phase of my research, I conducted a content analysis of primary source documents that pertain to the history of community gardens, as well as soil contamination and brownfield remediation within Burlington. With help from Prudence Doherty at the Silver Special Collections Library at the University of Vermont (UVM) I explored the papers of Lyman P. Woods for relevant information regarding garden origins. This led me to find many other garden-related publications and documents housed in the gardening section at the Silver Special Collections Library at UVM.

I accessed the full archive of the Burlington Free Press from which I clipped relevant newspapers regarding soil contamination, pesticide use, unregulated contaminants, garden formation and public perception of gardening in Burlington throughout the years. Through conversations with historians Dona Brown and Vince Feeney, I was also pointed in the direction of publications from the Vermont Historical Society including their audio archive of oral history interviews with back-to-the-landers and a publication on Burlington's working-class history.

Selecting Narrators

Interviewees were identified through a combination of maximum variation sampling and snowball sampling methods to build a pool of respondents that represented a diverse range of voices and experiences (Lindlof & Taylor, 2011). Perspectives I was interested to feature included New American and refugee community members, Indigenous community members, women gardeners, socio-economically disadvantaged community members, elderly gardeners, and long standing BACG members. Inspired by the organization of Blofson (2015), who

conducted an oral history of the Intervale, I created a spreadsheet to keep track of the perspectives and facets of the project each interviewee contributed to (see Appendix H).

Scheduling and Access

Introductory emails or phone calls were made directly to individuals to invite participation (see Appendix D). Kate Haughey from the Vermont Folklife Center connected me with two New American gardeners who she had prior experience interviewing. Based upon her prior relationship with them she suggested a means of compensation be offered. A stipend of \$50 or a trade for gardening labor was offered for the hour-long interview. No external funding source was used for the stipend. Once participants agreed to the interview, they were sent an interview consent and release form allowing them to detail their preferences regarding the review of their interview materials, the use of them in the podcast, and the archiving of them with the Vermont Folklife Center (see Appendix E). Interviews occurred, depending on the participants availability, between a few days and a few weeks after their consent to participate.

Interviews

In the fall of 2022, I completed the IRB Review Self-Determination Tool which verified that this project does not constitute research. According to the policy defining activities which constitute research at the University of Vermont/University of Vermont Health Network, this work met criteria for operational improvement activities exempt from IRB review. Audio interviews were conducted with 12 community members and key stakeholders, involved in Burlington's community garden scene. They were conducted in person, over the phone and over Microsoft teams. One written interview was conducted as well.

In preparing to interview gardeners, preliminary research on their connection to the gardens and their role within the Burlington community was done to the best of my abilities. This allowed me to personalize the interview protocols for each gardener. Sample questions for gardener interviews can be found in Appendix F. Questions were designed to be open-ended, starting with a person's first memory or relationship to gardening and leading to why they became involved in the community garden scene in Burlington. As per the guidelines of oral histories, I sought to intervene intentionally, encouraging the narrator to provide the fullest responses to the questions as possible and offering follow up questions and redirections only as the opportunities presented themselves (Oral History Association, n.d.).

Informant interviews were conducted with local historians, former BACG board members, community activists, the manager of the Agricultural Soil Testing Lab at UVM, and the Community Garden and Parks Outreach Coordinator for Burlington Parks Recreation and Waterfront. These interviews were semi-structured and followed interview guides designed to elicit the person's expertise as it related to this project. Sample questions for informant interviews can be found in Appendix G. In two instances, interviewees fell into both interview categories. In these instances, two sets of interviews were done, where interview number one was conducted in an oral history style and the follow up interview was semi-structured.

Recording and Transcription

Interviews were audio recorded with the interviewee's consent. All recordings were made with a solid-state memory card recorder obtained through the podcast kits offered by Multimedia Services at the Howe Library at UVM. While the equipment in the podcast kits varied slightly from one to another, in most cases I received a TASCAM DR-40 with an additional external microphone containing a windscreen. The use of my phone or iPad as a backup recording device

was used in all but one instance (for which a backup device was not used). Transcription of all audio interviews was done through the transcription software Trint and hand edited for accuracy. Once edited the transcripts coupled with a copy of the audio recording were sent back to participants that had requested their review. All audio from the project, including the finalized podcast, was archived at the Vermont Folklife Center upon completion.

Podcast Production

Once the interviews were completed, the edited transcripts were uploaded to Nvivo to informally group quotes across all audio interviews by theme. I landed on the production of three episodes, each ranging from 20-40 minutes, which is standard for most podcasts according to statistics produced by Buzzsprout, a leading podcast hosting platform (Buzzsprout, 2021). The book *Out on the Wire* by Abel (2015) as well as an audio editing and storytelling document by Wesley (2022), were notable references used in the scripting of the podcast.

For the production of the podcast, GarageBand, a free digital audio workstation was used. The Shure SM57 microphone, which is predominantly an instrument microphone but was freely available to me, was used for the recording of the podcast. Audio from the interviews conducted was added and edited for sound quality while preserving the integrity of the interviewee's stories. Music and sound effects were downloaded royalty free from Pixabay and integrated according to guidelines put forth by Jonathan Menjivar who produces the music score for *This American Life* (Menjivar, 2015).

Dissemination of information

To increase dissemination of the podcast, two platforms will be used. Soundcloud is a freely available service similar to YouTube allowing listeners to access the podcast without

subscription. In uploading the podcast to Soundcloud, an RSS feed is produced allowing it to be widely shareable on other platforms. The podcast was also uploaded to Spotify for distribution via their platform . A *Podcast Tile* with the thumbnail image for *The Gardens Nearby*, as well as a short description and a QR code were also distributed in an effort to reach local listeners. The QR code links to a [website](#) created by Allison Spain and myself, which includes a longer description of the podcast as well as direct links to where listeners can access the podcast.

Transcript of Podcast

The Gardens Nearby is a three-episode podcast exploring the question: How has soil contamination impacted community gardening and those that want to grow food in Burlington, Vermont? In episode one, the history of community gardening and the Burlington Area Community Garden program is covered while touching on themes of development pressure and land access that have created precarity for the community gardens. Building upon the historical and social background of the community gardens established in episode one, episode two dives into the soil contamination piece, exploring the history behind the contamination and the impact it has had on gardeners and community garden development. Lastly, episode three delves into the human element of why residents return to community gardens year after year, underscoring the multitude of value these spaces have within the community.

See Appendix A for Episode 1. Space

See Appendix B for Episode 2. Soil

See Appendix C for Episode 3. Culture

Community Event

The impetus for the community event was originally to be an opportunity for reciprocity, education, and action. My hope was to share back the podcast and the knowledge learned throughout the course of this project and provide an opportunity for further conversation on soil contamination. In an effort to decenter my voice and collaborate with others in the garden scene in Burlington, I reached out to Carolina Lucak at the Vermont Garden Network. Given their small team and the hectic nature that is spring time as a gardening organization, she did not feel they had the bandwidth to work on another event but invited me to become involved in their annual seed swap event.

I pitched to her the idea of my table having a variety of soil contamination related information including a pamphlet on phytoremediation of lead using sunflowers and resources from the UVM Agricultural Soil Testing Lab for gardener soil testing. She thought those sounded great and mentioned specifically that promotion of the soil testing lab would be great since she thought it was an underutilized resource. Vermont Garden Network also set aside packets of sunflower seeds for me to distribute.

Prior to the event I met with Dan Needham who runs the UVM Agricultural Soil Testing Lab and he walked me through the process from preparing a sample, to filling out the form, to interpreting results. Ahead of the event I printed out a handful of soil sample submission forms as well as the “How to Take a Soil Sample” document listed on their website for folks at the seed swap event to take.

Using Canva I designed two pamphlets for the event as well one on gardening in urban soils and one on phytostabilization of lead using sunflowers. While I had initially read that sunflowers are able to phytoremediate lead, further research suggested that because of the way

lead interacts with most soil, sunflowers are not able to extract lead (Egendorf et al., 2020). They are still beneficial in leaded soil however, as they help to keep lead in place, preventing it from being kicked up into particulate matter that can be inhaled or ingested.

Lastly, I designed, what I called, podcast tiles. These had the name and thumbnail photo for my podcast on one side and a brief description of the podcast with a QR code on the other. The QR code linked to a “current student works” website page connected to the Food Systems master’s page. While the page currently has a longer description of the podcast and mentions it is “coming soon”, links to the completed podcast will be featured on the page, allowing those with the QR code to access the podcast once it is released.

Description of the Event

On Saturday March 11th, 2023 at the Fletcher Free Library I had the opportunity to table at the annual seed swap. The event was organized by the Vermont Garden Network to get people excited about growing things and to have access to seeds, they may not be able to obtain otherwise. Though “seed swap” implies that you must bring seeds to exchange, the Vermont Garden Network is open to receiving all sorts of garden related goods including pots, seed trays and more. There are also no seed police per se, and many of the community members I interacted with were just thankful to access free seeds for their upcoming gardening season. From 10am to 1pm the library slowly filled with gardeners, ranging from beginners to the well-seasoned.

Informational tables were positioned in an outer ring around the center tables where most of the seed swapping activity happened. Burlington Parks Recreation and Waterfront had a table with community garden waitlist sign ups and wooden stake making for kids. Meghan O’Daniel, who I had interviewed for my project, was there and we chatted briefly before the event. “I think I owe you an email”, she said. I laughed and told her I did not think so and she replied “It’s that

time of year when I basically owe everyone an email”. Spring as a garden coordinator...My table was across the circle from hers, next to fellow Food Systems student LuAnna Nesbitt’s. LuAnna was also tabling to promote her podcast which tells seed stories from the keepers of regionally important crops.

I had created and printed out stacks of two colorful fliers about urban gardening and phytostabilization of lead using sunflowers (Appendix I and J). I also had information from the UVM Agricultural testing lab about taking a soil sample and provided the soil sample form for gardeners that wanted one. Lastly, I had created “podcast tiles” that had the thumbnail photo for the podcast on one side and a short description with a QR code linked to [this](#) website on the back (see Appendix K). Despite all the fliers, my table was looking a bit bare until Carolina Lukac arrived with a huge bag of sunflower seeds she had been saving for me. In it there were at least 7 different varieties of sunflowers ranging in size and color, and plenty of each packet that I could hand out full packets to each gardener interested in taking some.

Throughout the afternoon I had conversations with all sorts of folks. Some had done soil testing in the past and knew there were high levels of lead near their homes. Others had no idea that soil contamination was an issue in Burlington and had been gardening directly into the ground. It was wonderful to have a variety of resources depending on people's experience and knowledge of soil. I had the opportunity to meet one man, who was a professor of Environmental Studies at UVM in the 70’s and was Tommy Thompson's point person there, helping to establish community gardens on campus. Some gardeners just came up to the garden asking if I was “the sunflower lady”, looking for sunflower seeds to plant for fun.

Most people took seeds, many took soil testing information, about 25 people took my podcast flier and a dozen or so people wanted hard copies of the fliers I had created. It was a

very positive day and felt like a great way to raise awareness about soils in Burlington and also have some great conversations with the gardeners of Burlington.

Figure 1

Table at the Seed Swap



Figure 2

Seed Swap at the Fletcher Free Library



Figure 3

Speaking with a Gardener



Discussion

Archival and Historical Research

Community gardens have been formally established throughout history during periods of war and economic crisis. These large gardening efforts, often made possible because of encouragement and resources provided by local governments, are generally well documented throughout Burlington. The preservation of the Burlington Free Press archives was an invaluable resource in finding information on community gardening efforts over the years. In conversations with historian Vince Feeney, he spoke to the fact that there were likely other subsistence gardens that communities would have tended to, however they would hardly be something “newsworthy” in their day and so likely would not have made headlines.

There is a record of the Abenaki peoples growing food near the Winooski River and on the land we now call Burlington as far back as 4,000 years ago. However, the history of these gardens, and other subsistence gardens that have likely existed throughout Burlington’s history, have a weak presence within the largely positivist institutional records available. Instead, these histories are preserved and live on primarily through stories and personal histories, underscoring the importance of collecting and archiving oral histories for future research.

Participant Recruitment

With the variable inclusion of community gardens in written history, the collection of oral histories was an important piece of this project. Due to the nature of the research questions, I was interested in including voices of residents that may not have been historically prioritized. I had connected with Kate Haughey, executive director of the Vermont Folklife Center, during my time interning for them and she had offered to help make connections with two Bhutanese Nepali gardeners she knew. Since the 1990’s approximately 8,000 refugees have resettled in Vermont.

Many of these refugees have come from communities with deep cultural roots in farming and have chosen to garden in spaces provided by the community gardens of the BACG network and on land provided through the New Farms for New Americans program. I was keen to hear their stories and perspectives on gardening in these spaces and so was connected to them through Kate.

Apart from those two gardeners, most other gardeners I connected with were through the snowball sampling method, where an interviewee would suggest the name of someone else. I also found a few names referenced in newspapers or other gardener-related literature. In my experience, it was easiest to reach and find contact information for key players within the BACG history, however finding gardeners who were not involved organizationally and/or newer to gardening was challenging. Time was also a significant constraint in my ability to build the necessary connections and relationships which may have allowed for conversations with a more diverse group of people. While I was initially hoping to include more of the Abenaki perspective, the tenuous nature of the University of Vermont's relationship with the Abenaki community dissuaded me from engaging in communication with that community. Regardless, I was able to center predominantly female gardeners' voices and perspectives, which are historically excluded from the dominant narrative, speak to people spanning a wide range of ages, and from a variety of socioeconomic and cultural backgrounds.

Conducting Oral Histories

Oral histories allow for a shared authority between narrator and interviewer, centering participants' memories, and stories. Oral histories are largely open-ended, creating space for emergent themes and creative space for the narrative to unfold. For the context of this project this was both a strength and a limitation. While I set out with a few guiding questions, many of

my favorite stories told were the result of off-the-cuff probing or a spontaneous memory from the narrator. The breadth of information that was offered and explored during my interviews would not have been possible given a more rigid interview structure. However, long form interviews and the subsequent transcript editing and theme analysis was very time consuming and the amount of material produced was initially intimidating.

When conducting oral histories, emotional details of one's lived experiences can be brought to the surface. In one situation the passing of a narrator's son was brought up and it was clearly a heavy topic to discuss. While interviewing another participant, for whom English is a second language, a strong emotional response was triggered upon receiving the transcript of our interview. Through conversations with an intermediary, I was told the participant had insecurity and sensitivity around his language ability which were brought forth in seeing the transcript. After expressing my apologies and the assurance, through a mutual connection, of my intentions for the project, we were able to move forward amicably and he was still interested in having his story featured. This experience underscored the complex and emotional reality of qualitative research. Humans are inherently nuanced, multifaceted beings, and research that centers their stories must be done in a way that not only recognizes those qualities but builds in sensitivity and care.

Working in an Audio Format

The aural experience of conducting oral histories is largely a positive feature. “The very sound of a person's voice and vocal patterns describes who they are and conveys emotion, revealing meanings muted (or, worse, misrepresented) in textual representations and transcripts” (Blafson, 2015). There is a humanizing element in hearing the timbre of someone's voice, their inflections, and the imperfections in their speech. To capture oral histories however, there is also

an inherent recording element. This not only adds a level of complexity for the interviewer, it can have consequences for the extent of information shared.

One gardener, an important figure in the formation of the Myrtle Street Avant Garden, explained that she had a sensory processing disorder and preferred communicating via email. Accessibility was one of the primary reasons audio and podcasting was appealing to me initially and my conversation with her was a good reminder that not all formats will work for everyone. Fortunately, over email I was able to send along questions to both gain deeper insight in the formation of the garden and hear valuable personal insight into the process. In another interview conducted with a professional within the community, the vulnerability in sharing information on the record was brought up. While he was happy to share specific information with me directly to help in my framing of the narrative, he wished to have the recording device stopped. This was the only overt instance of someone asking for information to be kept off-the-record but it served as a reminder of another limitation of this format.

Field Recording

The interviews conducted for this project were done both in person and over Microsoft Teams. Each modality had pros and cons. Given the timeframe of the project, Microsoft Teams allowed increased flexibility for many in their availability to speak with me. Most interviews were also conducted during winter months when meeting outside was not an option and for some, given lingering precautions around Covid, meeting via Teams was preferable. However, the sound quality over Teams was variable depending upon the microphone the interviewee was using and the strength of the internet connection. In one circumstance, such technical issues arose at the beginning of the interview, I made the decision to hang up and try again on a different device.

In-person interviews ranged in location. While a couple were able to take place at the Archibald Neighborhood Community Garden, winter was prohibitive to conducting further interviews outside. Depending on the participant, arrangements were made to meet at their home or at a secondary location which included on campus and at the Association of Africans Living in Vermont (AALV) offices. While in-person interviews were sometimes logistically challenging to arrange, the experience of meeting folks face to face provided me with a deeper understanding of who they were. In most cases, the invitation of the participant into their home or to their community garden also felt like a significant leveling in the power imbalances often present in research and allowed for a sense of rapport to develop.

Through trial and error, I also became more adept at recording in the field. During my first in-person interview at the Archibald Neighborhood Community Garden I had issues with my handheld recorder powering down. For that specific interview we had decided to move around the space and being constrained by what I could hold, I opted not to start a second recording device. Unfortunately, about 20 minutes into the interview I realized my recorder was off. I restarted it, however I noticed a few minutes later that it had shut itself off again. I switched over to using my phone's voice memos app to capture the remainder of the interview. While I had plugged it in prior to the interview to try and avoid battery related issues, I realized post-interview that it operated on AA batteries. Fortunately, the interviewee was very understanding and was able to speak with me a second time to capture some of the information I had failed to record in the initial interview. From that situation I learned to check the battery before the interview and to always start a second recorder. Additionally, I realized that sitting for interviews was preferable due to my inability to carry all the necessary equipment to double record.

Scripting and Editing

In the narrative style of podcast I have chosen to produce, scripting the narrative has been essential. As I also discovered, writing for speaking is stylistically very different from formal academic prose. In *Out on the Wire: The Storytelling Secrets of the New Masters of Radio*, Alex Blumberg, host of *Planet Money*, describes a narration process that Jad Abumrod and Robert Krulwich, of *RadioLab*, popularized, using conversation between two people to narrate a story (Abel, 2015, p. 125). Jad further explained that the conversational style allows them to essentially talk through complex subject matter, trying to explain things in a variety of ways until they land on a version that is both the most explanatory but also natural sounding because it originated through conversation (Abel, 2015, p. 122). Having a second person on this podcast, especially through episode one, where there is a lot of historical context and narrator dialogue, may have helped to make the subject matter more engaging and interesting. Through listening to a variety of narrative style podcasts including *This American Life*, *Brave Little State* and *RadioLab*, I became aware of the need for signposting as well. Signposting can be done in a variety of ways in podcasting, but is often used to tell the listener what to pay attention to and to give them a moment to catch up. However, as pointed out in *Out on the Wire*, figuring out where to include signposts can be incredibly challenging for the writer to do (Abel, 2015, p. 128). Having listeners pre-listen to material to offer feedback on where they are becoming lost, is something in hindsight I would have liked to build into my timeline.

During the recording process I found myself needing to make a lot of minor edits to the text to ensure the final product sounded engaging and natural. As a rule, I have learned that shorter, more concise sentences are far more read-able and sound more natural in the spoken language than the longer compound sentences we often use in academic prose. In a purely textual format, I would likely have made additional edits and tweaks to the language; however, in an

audio format the script has to be recorded, arranged to fit into the larger episode and then edited for sound quality. While I did re-record small sections on multiple occasions, the tone of my voice, at least to my ear, was clearly different. In some instances, it was different enough that I did not feel it sounded good to patch work it together and so made the decision to re-record larger chunks to keep the continuity in sound. Attempting to ensure levels and recordings from different recording sessions were acoustically consistent across the episode has been a test of my editing ability. Given more time, there could certainly be improvement in the quality and continuity of sound.

Community Event Reflection

Having an opportunity to connect with community members and speak one-on-one about urban gardening and the complexities that come along with it was a highlight of this project. While my initial vision of the community event did not pan out, I am grateful to have had the opportunity to connect with the gardeners of Burlington and the folks at the Vermont Garden Network through the annual Seed Swap.

Going into the event I came prepared with many fliers and other available information to meet gardeners wherever they were at in their gardening journey. I also brought promotional information for my podcast, but decided to prioritize education surrounding urban soils, the distribution of sunflowers, and soil testing, over speaking to gardeners about my podcast. For a tabling event it was simply too much additional information. Ultimately it was for the best as I still had the opportunity to talk about my podcast and my project with folks that specifically asked about the flier or in subsequent conversations where the topic came up more naturally. However, I wanted the major takeaway from my table to be an awareness of lead and urban soils and so that is what I predominantly focused my attention on.

As with any sort of public event, people bring their own stories to the table, and it was wonderful to talk to even more gardeners about their experiences growing food here in Burlington. I had one woman who even pulled out her phone during a slow moment to show me photos of her garden in full summer regalia. It was also interesting to hear themes and sentiments I observed through my interviews and historical research reflected in the stories people brought to my table.

All-in-all the event was very positive. It was resoundingly wonderful to connect with gardeners and feel their excitement about the upcoming growing season. I have also recently had conversations with both the city Community Gardens and Parks Outreach Coordinator and various people at the Vermont Folklife Center about extending the life of this project through community-based events, providing more opportunities for connection and reciprocity.

Conclusion

In Burlington, the history of the city is reflected in the soils, necessitating an awareness of safe gardening practices for urban gardeners. Until the 1970's the unregulated use of lead and other heavy metals, and lack of systematized solid waste practices, led to residual contaminants being present in many soils. Through interviews with 13 gardeners and key figures within the gardening community a three-part story is told through a narrative podcast format. *The Gardens Nearby* details how soil contamination fits into a larger problem of available open space for community gardens, the resiliency of residents and neighborhoods faced with soil contamination, and the resounding benefits these spaces have for individuals and communities alike. Through the application of adult learning theory and place-based change methodology, the podcast and supplementary materials created for the community event are designed to inspire and engage residents in support of the development and prioritization of community gardens within their neighborhoods. Through a food sovereignty framework, the multi-functionality of these spaces necessitates continued advocacy for their expansion and development. In light of COVID-19 and the high demand it has created for community gardens, engagement around these issues is well-timed.

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Appendix A: Episode 1. Space

The Gardens Nearby - Episode 1. Space

[Soundcloud](https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-1-space) - <https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-1-space>

[Spotify](https://open.spotify.com/episode/2zkn8vV9WGWiLFX9oR7Jpv?si=08441c7151bb438e) - <https://open.spotify.com/episode/2zkn8vV9WGWiLFX9oR7Jpv?si=08441c7151bb438e>

The Gardens Nearby

Hosted by April McIlwaine

Episode 1. *Space*

[Intro Theme Music]

Meghan O'Daniel [00:00:02]

The hardest part is finding the space. There's just so little open space that's not under an open space production.

Megan Humphrey [00:00:10]

I think the biggest part was financial. We just weren't we weren't raising enough money.

Jim Flint [00:00:16]

You kind of go with the need and what the demands are and where the opportunities might be.

April [Host] [00:00:26]

I'm your host, April McIlwaine. And this is the Gardens nearby. A three part series investigating a central question. How has soil contamination impacted community gardening and those that want to grow food here in Burlington, Vermont?

Community gardens situated on an urban land, come with a whole host of complexities. And although Burlington is a relatively small city, it's certainly got its own unique and nuanced history when it comes to the community gardens.

As I realized early on, where we garden in urban spaces has a big impact on the soils we garden in. But the “where” of it all isn't as straightforward as it may seem.

To understand how we ended up with gardens where they are now. We also have to touch on why people have historically created community gardens and what it has taken to keep them going.

I spoke with Dona Brown, UVM history professor and author of *New England A Landscape History* about the beginnings of public organized gardening here in Vermont.

Dona Brown [00:01:37]

There were probably something like organized public gardens in the in the early 20th century. Before the victory gardens, they usually had, whenever there was a really bad economic crisis, a city would start to set aside some public ground for people to grow their own. You know, it was usually potatoes that was like this big obsession in the early 20th century because people could basically live on potatoes. And so you could put in a small potato patch and make a big difference in your household's standard of living.

And because because before World War Two, most people spent something like around 30% of their income on food. That made an enormous difference, having access to the garden.

April [Host] [00:02:27]

A Burlington Free Press article from spring of 1943 stated that more than 300 victory garden plots were created in response to World War Two.

[Sound – Garden Noises]

Victory gardens, also known as War Gardens, were promoted during both World wars by the U.S. government as a way to increase the food supply and boost morale among citizens. Gardens were prepared in Burlington by the Burlington Street Department, plowing land that had been leased on various private estates, school grounds and public parks.

These victory style gardens, however, were created almost entirely out of necessity. And so once people felt more economically stable, the gardens fell by the wayside and were no longer in production.

April [Host] [00:03:10]

Community gardening as we know it in Burlington really began because of one man, Lyman Wood.

[Music]

Lyman Wood, was an entrepreneur born in Mount Vernon, New York. Following World War Two, Wood started a number of entrepreneurial endeavors, all linked to his passion for what he called the "garden way of life". This included founding a New York based company called Garden Way Manufacturing, which produced the Troy built Roto Tillers, as well as the development of a Vermont branch of the Garden Way complex located on Ferry Road in Charlotte.

April [Host] [00:03:46]

Wood was interested in starting a pilot community garden project and was scouting for land that might work when the Cliffside

Country Club, located on the shores of Lake Champlain, sold its 45 acre property to the city of Burlington.

Wood jumped on the opportunity to introduce a garden to the grounds and submitted a proposal to the Burlington Parks Superintendent Sidney Baker and the Parks Commissioners in September of 1971.

The proposal was questioned by some at first, and considerations were made between the garden and a softball or a little league field for that location. In November, the proposal was finally accepted and a site near the Flynn Avenue entrance to Cliffside was plowed in preparation for the spring 1972 opening. Cliffside would become Oak Ledge Park later that year.

[Music]

[00:04:37]

The United States was still heavily involved in the Vietnam War during 1972, and it led to higher prices for food, energy and commodities. Despite the economic situation, Lyman Wood really envision these gardens as part of something bigger, more than just a victory, garden style space where the community could grow food.

[00:04:56]

The time was right for a new type of gardening to take hold. Between the 1960s and 1970s, an estimated 40,000 people moved into Vermont during the back to the land movement.

Dona Brown [00:05:09]

Like most people I've encountered who moved to Vermont in a kind of consciously back to the land way, were responding to political circumstances around them.

It was political organizing people were sick of [phone ringing] or they had encountered a lot of violence in the cities, or they felt as if they were getting nowhere and that they needed to go back to some sort of more fundamental or deeper kind of reappraisal of what was going on.

April [Host] [00:05:39]

That's historian Dona Brown, who we heard from earlier and who also authored the book *Back to the Land The Enduring Dream of Self-sufficiency in Modern America*.

Dona Brown [00:05:49]

I think it had an enormous. Really not fully understood yet impact on the state. When you look at the social impact on the old cities, Brattleboro and Burlington and sometimes Springfield and older industrial cities like that, you'll see that they did build these little infrastructures, health free health clinics um in Burlington,

gardening, CSA's or what we're not yet called CSA's, food co-ops that didn't exist before.

A lot of them were organized by people who were leftists who believed in kind of organizing people to get what they needed for themselves and not to, and to allow them to deal with their poverty or their unemployment in ways that were socially useful, like free health care and free or inexpensive food, gardening, those kind of things that allow, you know, kind of create a cushion for people who don't have much money.

April [Host] [00:06:49]

The vision of community gardening that Woods had was well aligned with the values and ideals many in Burlington were looking for. In the winter of 1972. He created the Gardens for All ad campaign that would kick off a legacy of community gardens in Burlington and beyond. As garden historian Jim Flint wrote, the ad campaign intended to attract prospective gardeners with no land of their own and matched them with experienced garden coaches. The focus was on priceless joy and satisfaction of growing your own fresh, delicious and healthy vegetables. In late 1972, gardens for All had grown from a marketing concept into a not for profit organization. With growth on the horizon. Woods determined he needed to bring someone in specifically to help expand community gardening in Burlington.

[Music]

April [Host] [00:07:40]

Bryson H. Thompson, known around town as Tommy Thompson, was born in Shelburne, Vermont, during World War Two. Thompson served as a cryptographic technician, operating equipment used to code, decode and transmit secret information.

After the war, he and his wife purchased a vintage 1930s Road Roadhouse on Route five in Ascutney, Vermont, and renamed the Establishment the Top Hat Restaurant. After a 25 year run, the Thompsons sold their business.

[00:08:11]

During this time, the Thompsons only daughter, Marilyn Leimenstoll was an enrichment educator and community activist living in Burlington. She had collaborated with teachers at the H.O Wheeler Elementary School in Burlington's Old North End to develop curriculum that put arts and science together. In an effort to expand the program, she was connected to Alec Webb, whose father, Derek Webb, owned Shelburne Farms. Together, they organized a family group garden project in 1972 on Shelburne Farms, where Gardens for All staff were brought in to help 15 families learn how to grow vegetables.

[00:08:48] Alec Webb had been introduced to Tommy Thompson by Leimenstoll during this time and recommended him to Wood as the perfect person to spearhead the community garden initiative.

[Music] In January of 1973, Tommy Thompson was hired. His first goal was to help 1000 families in the Greater Burlington area to plant and tend 700 vegetable garden plots. Gardeners would pay no fee to use the garden plots located on public and private land.

[00:09:18] As part of Thompson's outreach efforts, he approached the College of Agriculture at the University of Vermont. Unfortunately, the college was not looking to add new programs, especially those not directly related to farming and agribusiness. And Thompson's idea of establishing community gardens on UVM land was rejected. Holding out hope.

Thompson reached out to UVM's newly created environmental studies program. Tom Hudspeth, who was the assistant director of the program, and had experience as a community gardener himself, decided to assist in the effort.

After pouring over maps with the director of development, Thompson and Hudspeth secured three locations for community gardens, which were plowed during the fall of 1973 to support community gardens opening the following spring.

[00:10:08] I want to pause here just to take in the amount of effort it took for these guys to get this program off the ground because, whoa!

[Music] Community gardens were booming, growing from 12 garden sites in 1973 to 23 sites in 1974. Can you just imagine the way that must have transformed neighborhoods across the city? Formerly derelict lots where all of a sudden filled with gardens, churches that may have had some green space around them now had vibrant lawns filled with veggies. It must have been an amazing thing to see.

[00:10:50] Over the next few years, however, competing interests for land and resource availability at garden sites and fluctuations in community interest led to changes in the Burlington community gardening landscape.

Jim Flint [00:11:02] There's a social change that happens just in terms of technology and things like that.

- April [Host]** [00:11:07] I spoke with Jim Flint, Burlington Community Garden historian and former executive director of Friends of Burlington Gardens, about the shifting, often tenuous nature of gardening.
- Jim Flint** [00:11:17] And, you know, you saw that back in the in the in the seventies where, you know, economics were driving, you know, high food costs and energy costs make gardening sound really appealing. But there wasn't a lot of staying power because once the economy started to improve a little bit and people said this is a lot of work for what we're getting and a lot of people were weren't that successful at it. The infrastructure wasn't there to support it long term. It's tenuous.
- April [Host]** [00:11:48] This was unfortunately the case for two of the hard won UVM gardening sites. Many students that planted gardens in the spring left during summer months, leaving many of the sites unruly.
- Jim Flint** [00:12:00] You run into problems like at UVM, where all of a sudden the gardens are looking a little unsightly. And somebody said, You know, this isn't the way we, you know, we want our campus to look.
- [Music]**
- April [Host]** [00:12:14] After the 1976 season, community garden sites near the East Avenue Jug Handle and on Water Tower Hill were discontinued. In the same year, another large garden, one situated beside St Paul's Cathedral, was closed in preparation for the building of a housing project.
- Even the garden that started it all at Cliffside, went by the way of changing times. As Oak Ledge Park became more popular, the park became an after hours hangout for partiers and the community.
- Gardeners experienced vandalism and stealing of produce. The garden was closed in 1978 and is now the site of a basketball court.
- [00:12:57] Recognizing the need for more long term stability. Tommy Thompson worked to establish long term land lease agreements, securing sites at the Ethan Allen Homestead in partnership with the Winooski Valley Park District and a smaller site at the Lakeview Cemetery Grounds.
- [00:13:15] In 1979, Thompson met with officials at the Burlington Electric Department, also known as B.E.D., and received permission to prepare a one acre site at the Intervale on B.E.D. land for use as a community garden.

[Music]

The Intervale has a rich agricultural history with evidence of indigenous peoples settlement around the Intervale. as far back as 4000 years ago. The Abenaki people grew a variety of crops prior to European invasion, including corn, beans and squash known as the Three Sisters.

In the 1930s, the land situated on the banks of the Winooski River was transitioned out of farmland and into a city dump. And if you're thinking, wait a minute, I've had veggies from the farms down at the Intervale... The site was cleared of trash and the soils restored in the late eighties and early nineties prior to its current use as a farm incubator program.

[00:14:13]

Actually Will Wrapp who was the president of Gardeners Supply and work to restore and transition the Intervale land back to its agricultural roots, was affiliated with gardens for all in the early 1980s before he began his own entrepreneurial endeavors.

[00:14:28]

While Thompson worked diligently to secure land for community gardens, internal conflict brewed at the Garden Way Company.

[Music]

The Garden Way partners and board members were increasingly unsupportive of Woods visionary projects, and on January 28th, 1982, Lyman Wood was ousted as president of Garden Way in a surprise coup.

[00:14:51]

After the coup, Gardens for All was notified by Garden Way's new owners that it would lose the bulk of its annual funding. This led to staffers taking significant pay cuts of up to 50% to stay afloat. Burlington's Community Garden Program Face a pending transition.

[00:15:09]

In 1983, after a decade dedicated to creating community gardens in Burlington, Tommy Thompson, at the age of 65, made plans to step down from gardens for all.

[Music]

Thompson died of a heart attack during his last week of work on March 22nd, 1983. A fund was established in his memory, dedicated to preserving and expanding permanent community garden sites and to protecting the sites from development. The Intervale. Community Garden was also expanded during this time and named in his honor.

[00:15:55]

After ten years coordinating community gardens Gardens for All past its local garden torch to a new nonprofit organization.

[Music]

The formation of Burlington Area Community Gardens, or BACG, was to be run by a volunteer board of directors. Two years later, the gardens hired Megan Humphrey to coordinate the community garden program.

[00:16:16]

Megan originally had come to Burlington to attend UVM, graduating from the social work department in Gerontology. Post-Graduation, she had worked with Cathedral Square, which was a newly opened assisted living facility.

Charlie Nardozi, who's on the board for BACG installed gardens there and as a friend of Meghan's from UVM, he told her about the job. Here is Megan talking a bit more about what she did for the organization.

Megan Humphrey [00:16:41]

So my role was to act as a liaison pretty much between all of the site coordinators, the board and all of the gardeners and as well as any of the services that needed to be implemented at the garden site. I think when I started there were six sites and then by the time I left, there were eight sites. They became involved in all different kinds of ways. Sometimes the city owned the property, sometimes it was borrowed from a church or other landlords, property owners or something like that. So that varied definitely.

April [Host] [00:17:15]

A fun anecdote.

Megan Humphrey [00:17:16]

The office was. Right next door to where Penny Cluse is now. And Ben & Jerry's was there then. So I was upstairs. I was in an attic office, so sort of hot, and all I could smell all the time were the waffle cones from Ben & Jerry's. And I still can't stand the smell of them because it was just that kind of syrupy sweet smell all the time.

April [Host] [00:17:40]

Despite the tireless work of many volunteers and board members, the nonprofit continued to struggle financially. Here's Megan Humphrey again.

Megan Humphrey [00:17:48]

We weren't raising enough money. We, you know, the plots. You want them to be affordable. And then in some cases we were waiving the fee or making it really, really small so that people who might not be able to afford it otherwise could garden.

April [Host] [00:18:01]

The BCG board drafted a proposal to the city of Burlington to run the community garden program.

- Megan Humphrey** [00:18:08] It's a really fine balance to be able to bring in enough money from the gardening fees, you know, the plot fees, and then still be able to pay somebody to oversee it and then pay the person mowing the site and, you know, all of those other things that come with it. So, yeah, that made it really difficult. And so it just seemed like it would be a good idea to to go under the city umbrella.
- April [Host]** [00:18:36] In 1987, the program officially transitioned to being managed by the Parks and Rec Department. Jim Flint had this to say about the transition.
- Jim Flint** [00:18:45] You know, it's a testament to the you know, to the, you know, to the spirit of Burlington that maybe it's at that point where it could become institutional.
- [Music]**
- That's a big step forward. A little lost on the grassroots side, but more permanency for the garden.
- April [Host]** [00:19:02] This transition seemingly marked the end of an era for the community gardens of Burlington. However, with a new era came new issues.
- In the late eighties and early nineties, Burlington's open spaces dwindled. Smaller developments began slowly consuming, remaining open space and encroaching upon important natural and recreational systems highly valued by the Burlington community.
- The Burlington Open Spaces Protection Plan, which grew out of a 1997 City Council resolution, found that between 1980 and 1989, Burlington lost 16% of its open spaces, reducing the total open space to approximately 22% of the city's area. This reflected a nationwide development trend.
- The American Farmland Trust estimated that 4.2 million acres of prime or unique farmland were converted to urban uses between 1982 and 1992, a loss of nearly 50 acres every hour. Even with the gardens under city management community, gardening was at an all time low with under 200 garden plots available in 1992.
- Jim Flint recalled being asked to join the board to assist in the development and formation of new spaces for gardeners.
- Jim Flint** [00:20:25] We community gardened for five years, just on our own, just for our family. And in 1992, 30 years ago, we went to the garden potluck at Ethan Allen Homestead.

And at that potluck I met some of the board members for Burlington Area Community Gardens and Maggie Luger's, who was the superintendent or the coordinator for a variety of Parks and Rec, and they had talked in the newsletter about opening up a new community garden at Starr farm in the New North End and I and I said, well, what when might that happen? And they said, well, we're working on it but we could really use another board member. So could you join?

April [Host] [00:21:08]

In the late 1980s, land in the New North End that had once been a 200 acre estate of John J. Flynn was being reviewed to rewrite several leases in an attempt to make the estate more profitable.

While much of the land had been previously leased out to local residents. Nine acres were leased to the city of Burlington for the formation of a park. With new land available the BACG board eye'd the space for a community garden site. Here's Jim again on turning the land into the Starr Farm Community Garden.

Jim Flint [00:21:40]

So Starr Farm, which was kind of interesting. We, the City of Burlington, didn't have the capacity to run another a big community garden. So four volunteers from the board, myself and three others, we got permission to run it on our own.

[Music]

And you know, had we known maybe how much of it of a project that would be, you know, perhaps we might have started a little smaller, but we started with 50 plots the first year, got insurance, got grants.

You know I learned how to write grants, from others, you know, I didn't, you know, develop it all. You know, Charlie Nardoizzi wrote the first couple of grants and I thought, okay, all right, I can learn how to do this.

April [Host] [00:22:27]

The group that had come together to run Starr Farm formally organized into a nonprofit called Friends of Burlington Area Community Gardens, with the goal to further support the BACG program and specifically work on expanding the program to more locations.

Jim Flint [00:22:40]

It was fairly easy to get permission from the Episcopal Diocese of Rock Point to start, you know, start a small community garden there.

And we started out with just, you know, ten plots, you know, and and you just sort of started small. And then then it, we ended up

adding another section, doubling the size, putting in a water system. You know, it just is kind of, you kind of go where the need and where the demands um and where the opportunities might be.

April [Host] [00:23:10]

Within a year, they had worked themselves out of a job with the Parks and Rec Department as they advocated for the city to hire a designated garden coordinator.

Jim Flint [00:23:18]

So once there was a coordinator in place, then we became Friends of Burlington Gardens because we needed to expand our mission out to help neighborhood gardens, school gardens in order to have projects to work out.

We were still supporting the community gardens but not doing the things we a lot of the things we've done before because there was a coordinator now to do that.

April [Host] [00:23:43]

For gardens like Starr Farm where there were many acres to spare, allotment style gardening was used, meaning each gardener was given 500 to 700 square feet of tilled earth to garden directly into. However, with dwindling open space, Friends of Burlington Gardens turned their support towards the formation of a garden with a much smaller footprint.

Jim Flint [00:24:06]

After Starr Farm, we couldn't develop allotment gardens anymore. There weren't there, there weren't new sites in Burlington to do that at, so we started to look at these little small neighborhood gardens. Instead of 25 by 25 foot plots. You know, smaller raised beds and people and, you know, in a tighter, in a tighter setting in a very urban Old North End setting.

April [Host] [00:24:34]

In 2007, at 15 Myrtle Street, there was a side yard containing a few garden plots. The 50 by 50 foot lot was owned by the developer Redstone, and they had had the site appraised in pursuit of a permit to build a new house.

Fearing the loss of open space, a group of neighbors and invested community members formed the Myrtle Street Avant Garden Association. I emailed Maggie Standley, who is the co-founder of the Myrtle Street Garden Association, and she had this to say about the process.

[Music]

Voice reading for

Maggie Standley [00:25:07]

I live in the neighborhood and on the street actually. Other neighbors had different motivations and we came together.

Some didn't want it to block their sun or view or have this coveted open yard built on. Some wanted mainly a community garden. It doesn't impact my view or home at all. But I did feel more open, green and natural space with a win win for this dense neighborhood that's the most diverse in Burlington.

April [Host] [00:25:32]

Drafting a proposal for a community garden. They attempted to strike a deal with Redstone. Maggie said.

Voice reading for

Maggie Standley [00:25:39]

I had the guts to ask the owner, Redstone, who had planned to build a dwelling on that space. And to our surprise, he said, let me talk to my boss. He came back, Erik Hoekstra, and said, We're in. We'll sell it to you.

April [Host] [00:25:53]

While the initial appraisal had valued the site at \$117,000. Redstone was actually in favor of the Garden idea and agreed to sell the site to the group for \$65,000.

Myrtle Street Avant Garden Association was not a formalized nonprofit, and in an attempt to obtain funding to pay for the site, they petitioned the City Parks Department to have the site purchased with money from the Conservation Legacy Fund, enabling them to become the 10th city backed community garden.

[00:26:22]

What is the Conservation Legacy Fund, you may ask? Well, the Conservation Legacy Fund was a ballot initiative passed back in 2004 that proposed increasing taxes by \$0.01 to create a fund that would be used to purchase land or conservation easements to permanently protect natural areas in Burlington.

[00:26:42]

As an aside, once passed, the Conservation Legacy Fund was used in 2007 to shift a 20 acre parcel of land down at the Intervale that included the Tommy Thompson Community Garden into the city Parks and Rec ownership.

[00:26:55]

But getting back to the Myrtle Street Avant garden, despite multiple city council members and even a development manager for Redstone advocating in support of the garden, the Parks Commission unanimously voted no.

Their verdict followed the recommendation of a park staff report which stated the plot was simply too small and would not serve enough people to warrant city ownership and long term care. Here's Maggie Stanley again.

Voice reading for**Maggie Standley** [00:27:21]

It probably would have been halted had not I spoke at a city council meeting in public comment something about how it made little sense that Parks and Rec wasn't for another community garden.

This piqued the mayor's attention, Bob Kiss and I could see the look on one of our city councilman's faces who was trying to steer us in another direction.

April [Host] [00:27:42]

The following day, Mayor Bob Kiss made a visit to the potential garden site with then Parks and Rec director Wayne Gross. As a former community gardener himself, Bob Kiss felt strongly that the decision made by the Parks Commission was premature.

[Music]

Given the location of the garden situated in the densely populated and historically underserved Old North End, he felt that the idea had merit and that the space would give relief to the neighborhood in terms of green space.

[00:28:10]

In May of 2008, the Myrtle Street Avant Garden Association, including Maggie Stanley, went before City council to make a presentation concerning their application to the Burlington Conservation Legacy Fund. And with the mayor's support, on June 9th, 2008, the City Council voted to acquire the land for \$69,000 paid out of the Conservation Legacy Fund. Maggie added that.

Voice reading for**Maggie Standley** [00:28:34]

Our project set a precedent for Burlington as the first time it was used to turn private space into public space.

April [Host] [00:28:44]

This was a huge win for the Old North End a historically working class and low income neighborhood and since the garden has flourished.

[Sound – Garden noises]**April [Host]** [00:28:56]

During COVID-19, a surge of interest in community gardening was a clear reminder of the need for these spaces.

Megan O'Daniel works for the Burlington Parks Recreation and Waterfront Department as the Community Garden and Parks Outreach Coordinator, and we chatted about changes in the program in the last few years.

Meghan O'Daniel [00:29:13]

I think the, like biggest shift I've seen is that instead of having some space be fallow. Not because we wanted it to be, that's that's not happening anymore.

April [Host] [00:29:28]

Fallow, meaning out of use essentially.

Meghan O'Daniel [00:29:31]

So yeah, overall, like that was building pre-pandemic, but it really propelled forward faster than I think it would have without the pandemic. You know, people needed a space to be outside.

[Music]

They needed a place to feel safe and comfortable and also grow their own food. Kind of growing their own food kind of came hand-in-hand with that, like, oh, I think a lot of people realized like relying on like societal norms for, like, everything is just like maybe a little scary.

April [Host] [00:30:01]

With current available space in Burlington, still is hard to come by as ever. I asked Megan what the city was thinking to accommodate growing interest.

Meghan O'Daniel [00:30:09]

The hardest part is finding the space. There's just so little open space that's not under an open space production thing that we as the city also have, which is equally as important, I feel. So the first question is like, where can we?

[Music]

We are like always interested in working through like, where can we expand the footprint of what's already there? So an example of that is the Callahan Garden in the South End. So that's in Callahan Park. It's up at the top and like there's room there, in theory, the tricky part is it's on a big hill.

So part of that is like it, it's not just like we want to expand like we do it. It's like, okay, we have to figure out how to terrace it. We also have to think about like putting in water systems, how that's going to affect the rest of the park. You know, so there are a lot of pieces that go into those thoughts.

So it's like I could sit around all day and be like, wouldn't that be great? Like, let's do this, this and this? And then it's like when you really get down to it, it's like, yes, and here are all the pieces that we need to work through.

April [Host] [00:31:24]

And I'll pause here for just a moment, because I think it's really important to highlight what Meghan is saying about focusing on garner success. Because while you or I might be able to point to places around Burlington where theoretically a garden could go, thinking about the logistics of actually gardening in those places to ensure that gardeners will not just be able to grow food but have a good time doing it, is a really critical calculation.

Because gardener happiness helps to ensure community buy in, and community buy in helps to ensure that these important community spaces continue to be recognized for the plethora of benefits they contribute - to gardeners, to neighborhoods and to cities alike. Here's one more important piece from Meghan.

Meghan O'Daniel [00:32:11] I think the biggest piece for like myself and my supervisor is being open to like opportunities and being ready to, like, engage in those as, if and when they come up. I'm just kind of like willing to get in those conversations and like, talk through and like be representatives of the program and like how we can engage in that, in that space, in that way.

April [Host] [00:32:34] Given the history of these gardens coming and going from neighborhoods because of changing community interest, development pressures and lack of resources, now having people within the Parks and Rec department thinking through those logistics and working with other city offices to ensure the permanency of these spaces is pretty amazing.

[Theme Music]
[00:32:52]

Under the Parks and Rec umbrella, there are so many more resources and an increased capacity to help bring to fruition the wants and needs of the community. But as we've just heard from Meghan, public interest is really important too.

Where do you want to see gardens filled with fresh organic foods? Where do you want to see spaces for education and social connection? Implementation of these spaces is not just up to the wills of the city, they can be inspired and advocated for by all of us.

[00:33:27] Join me next time for an incredible story of community members doing just that, working to put a garden where it's needed most. We'll dig into Burlington's industrial and working class history and confront the impact it's had on both our soils and gardeners interested in growing food.

[00:33:49] A huge thank you to Jim Flint whose contributions over the years to the Burlington Area Community Gardens and the record of their history is immeasurable. A big thank you to Meghan O'Daniel for clearing time in her busy schedule to speak with me, to Dona Brown and Megan Humphrey for sharing their expertise and stories with me. And to Maggie Stanley. I'm so glad we got your story and thoughts included. And thank you for listening. My name is April McIlwaine and this has been the gardens nearby. I hope to catch you next time for episode two.

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Appendix B: Episode 2. Soil

The Gardens Nearby - Episode 2. Soil

[Soundcloud](https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-2-soil) - <https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-2-soil>

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The Gardens Nearby

Hosted by April McIlwaine

Episode 2. *Soil*

April [Host] [00:00:00]

When Megan Humphrey bought her house in the old North end of Burlington, Vermont, one of the most remarkable things was that the history and the stories of the owners before her had been preserved.

Megan H. [00:00:10]

Yeah, I mean, I'm only this house is was built in 1890 by a French Canadian carpenter because that was this section, and then the next family purchased it and they lived here for over 100 years.

The family, the second family that purchased this house was also French-Canadian. And so there were the house is not even 1200 square feet, and they had ten kids. So there were 12 people living in the house. There's three tiny bedrooms. So it must have been like the parents and the boys and the girls.

And they also had young women coming from Montreal to either work in the mills or teach or something like that. And so I found some other. You know, there's other history of other people staying here as well and living here. So it must have been quite a zooey, a zooey place just people coming and going all the time.

April [Host] [00:01:12]

Burlington's heritage, the good and the bad can still be uncovered across the city. If you do a little digging.

Megan Humphrey [00:01:18]

In all of these locations, especially in the old North End that are so old. Who knows what's in the soil here? You know, I mean, we've we've found some things as we've dug, you know, we'll find marbles or a kid's old metal car or something like that, or a pipe or a horseshoe. And those things are kind of fun to find. But there are other things that you that you can't see that are certainly dangerous to be eating.

[Theme Music]

April [Host] [00:01:45]

For urban gardens, the history of the land and what the soil holds from years past is an important consideration. Join us as we explore what has made the soils in Burlington the way that they are and what that means for gardening here.

I'm your host, April McIlwaine, and this is episode two of The Gardens Nearby, a three part series investigating a central question: How has soil contamination impacted community gardening and those that want to grow food? In Burlington, Vermont?

[00:02:22]

In part one, we took a look at the history of community gardening in Burlington to understand how a multitude of factors, including gardener interest and development pressure, have shaped the current landscape of garden sites. If you missed it, you should go back and check it out as some of the information in this episode will build upon the previous one.

So to start us off, I want to lay the groundwork for this story by taking you back to the early days of industry in Burlington. Vince Feeney, historian, educator and author of the book Burlington A History of Vermont's Queen City, spoke with me at his home on a snowy winter's day. The fireplace whirring in the background.

Vince Feeney [00:03:03]

Almost from the founding of Burlington, 1780 1790s. But going up to 1900 was the lumber industry. And the real the heyday of that was from about the 1850s through about 1890. And this was what it was, was bringing down either logs or milled lumber from Canada just and much of that

[Music]

coming from Ottawa.

April [Host] [00:03:41]

And so at this time, Burlington's acting like a port city for these logs. Well, at first they were shipping out Vermont timber. By the 1830s, the Vermont forests were pretty well depleted. So they started bringing logs down from Canada, floating them down the Richelieu River.

A man by the name of Lawrence Barnes. He was a so-called lumber baron set up mills along the Burlington waterfront. There, they'd mill logs into boards and ship them back out along Lake Champlain, down to southern New York, the Big Apple.

Vince Feeney [00:04:10]

When that happens, then some other entrepreneurs began to think, Well, wait a minute, we got all this wood here. Maybe we ought to be manufacturing wood products. So some of them got together and

established on the waterfront in the late 1850s, what was called the pioneer shops. And the pioneer shops were nothing more than what we would call today incubator shops.

April [Host] [00:04:36]

Incubator shops, meaning small workshops for relatively cheap, where entrepreneurs were given space to produce manufactured wood products like window frames, doors, shoes, days, etc..

[Music]

April [Host] [00:04:48]

In the 1840s, a new industry arrived in Burlington, the rail industry, and this opened a lot of doors to lumber and other woodworked goods were able to be sold to.

Vince Feeney [00:04:58]

The manufacturers are making things out of the board, and then they can put whatever they manufactured on the trains and send them out to the larger American market. And the other industry that begins developing really began in 1830's in Winooski, was the textile industry. But you also had mills and in Burlington down on off of pine street.

[Music]

April [Host] [00:05:28]

Burlington saw significant population expansion during the 1840s as a direct result of these industries. Newcomers arrived from the North primarily.

Both French and English speakers from Upper and Lower Canada, as well as a flood of Irish escaping the great famine of the 1840s, many of whom arrived in Canada before making their way to the United States in 1860. Approximately 31% of the population was, "foreign born". This influx of people had a significant impact on the neighborhoods of Burlington.

Vince Feeney [00:05:59]

The the French Canadians, they settled out there at the far end of the the Old North End, Manhattan Drive, Bright Street. There was an area that literally was called the French Village you know? This would be in the 1830s, 1840s. Later on, by the time of the 1870s, 1880s, you find a lot of French Canadians right around now where St Joseph's Church is, and some people call that little Paris.

April [Host] [00:06:36]

As new workers came to town, tenement and boarding houses situated close to the lumber and textile mills filled up.

Vince Feeney [00:06:43]

And now the Irish, they initially lived down at the bay because they too worked in the lumber mills. And so you found the Irish where they really lived, and right up until around 1900 or so is like on a Battery Street on Cherry Street coming off of battery.

April [Host] [00:07:11]

Over a few generations, the Irish communities became more affluent around 1900 to 1910. They moved up into other professions, some of them becoming merchants. And you can see a migration of Irish families away from the waterfront up the hill to the area around North Union Street, Brooks Avenue, that area.

Vince Feeney [00:07:31]

They're, replaced by the Italians. The Italians become new railroad workers and they, doing the ditch digging work that you find in every community there's there's that kind of work available. Right. And of course, as you probably know, that area of urban renewal was where the Italians tended to settle down that area. I call it West Central Burlington, except for the Jews who first settled out there in the Old North End and even the French Canadians going back earlier settled out. But generally the place with the new people, the last group that comes in settled is basically Battery Street to Pine Street.

April [Host] [00:08:22]

That neighborhood would later be named King Street.

[00:08:26]

So. Okay. Burlington has an old history of industry which has historically drawn a relatively diverse group of people. And those groups of people, they formed small pocket neighborhoods across the city.

But if you're wondering what that has to do with the quality of our soils, perhaps you're envisioning Burlington, as it is today, a quaint city with a brick lined downtown, the neighborhoods filled with historic homes and the nearby waterfront park filled with picnickers in summer months.

[Music]

April [Host] [00:08:57]

Burlington looked a little different in the 1800's. Here's a recounting from the city's first health officer in 1865 describing the conditions he found many working class families living in.

He observed houses in which, "Every room is almost black with smoke and that the wooden sink spouts are rotten and the sides of the houses and the ground greasy and wet with slop water, unquote, in the streets". He said, "Horses, cows, hogs, hens and children are mixed up so that it is difficult to determine which is the hog pen and which is the nursery". In one tenement, he counted 51 people who just dumped, quote, filth and garbage outside their windows.

[00:09:43]

It wasn't until 1987 that the Vermont legislature passed Act 78, which created solid waste districts throughout the state. These were aimed at providing information on safe disposal sites and practices.

Before then, many residents brought trash to landfills on the edge of Burlington or disposed of it in their yards.

Megan Humphry [00:10:05]

That's I mean, when you stop to think about it, it can be pretty scary because I'm sure all kinds of gas and oil and everything else just was, they didn't have a one site that they took trash to. They put it out in their backyard. They'd have a pile or they burn it or something like that.

April [Host] [00:10:24]

That was Megan Humphrey, a longtime resident of the Old North End, who we heard from at the top of the episode.

Even the disposal of waste by businesses across the city was unregulated. Many neighborhood stores and businesses that were found in each neighborhood pocket, for example, automotive sale and repair shops, dry cleaners and roofers, they all used chemicals and other toxins that were not always dealt with properly.

[Sound – Metal Clanking]

[00:10:53]

Industry in Burlington also changed over the years. The waterfront transitioned from a lumber port to a rail yard and in the mid 20th century to a bulk petroleum storage facility. At its peak, 83 aboveground storage tanks were located in Burlington.

[Music]

In the south end, a manufactured gas plant, which is basically where gas is produced from coal and oil deposited coal tar sludge on its property, which eventually leached into the groundwater. The site is now a federally recognized Superfund site.

[00:11:31]

If you visit the city's website to read about the history of the environmental cleanup and the state of the soils, today they provide this list of contaminants that can still be found in Burlington soils across the city: Wood preservatives, paints, solvents, coal tar, petroleum products, dry cleaning fluids, coolants, chemicals left from tanneries, slaughterhouses and rendering operations, arsenic from wood processing, lead from paint and gasoline. And a broad array of chemicals and pesticides left over from years of unregulated use.

[00:12:07]

So let's pause here for a second, because that's a lot to take in. With Burlington's relatively small town feel, so many people are unaware of the remnants of its history that remain within the soil.

I spoke to a number of community members in the Old North End who are advised not to grow food in the soil at their homes due to known contaminants. Aloyse Rowley is a passionate gardener who lives in an apartment complex where residents have access to some lawn space.

Aloyse Rowley [00:12:34]

They had originally changed our soil down there so that we could have good soil to plant in. But they told us that we needed to do, like if we were going to eat them, to put them in pot and stuff like that.

April [Host] [00:12:49]

The real kicker is that for a really long time, many of the older neighborhoods where contaminants were regularly found in backyard soils also had little to no access to community gardening spaces.

[Music]

A report conducted in 1991 by Burlington Parks and Recreation and the Burlington Area Community Garden Board, looked specifically at neighborhoods in need of community gardens based upon a number of factors, including income and poverty levels, the neighborhood size and proximity to existing garden space.

They highlighted King Street, which you might remember is historically where newcomers lived and the old North End as the two neediest neighborhoods. And that's not even factoring in their soil.

In 2007, a group of Old North End residents decided to take action. I met Jess Hyman, who's an incredible community organizer, the former director of the Vermont Community Garden Network and a longtime Burlington resident, at the Archibald Neighborhood Community Garden to learn more about its unique founding.

Jess Hyman [00:13:56]

So this is the Archibald Neighborhood Garden. It was established in 2007 by a group of neighborhood volunteers, myself included.

The lot used to be well, way back when it was a car repair lot, and then it was purchased by the Visiting Nurses Association with the intention of turning it into a family room. But that didn't happen. And they found another another site. And so the lot had been empty for many years and full of weeds, full of garbage, graffiti all over the neighbors back fence.

And so when a group of neighbors was looking for a place to grow food in this community that has very little public greenspace, this

site was pointed out to us by Jim Flint, who was then the director of Friends of Burlington Gardens, a local gardening organization.

And so we came and took a look and it looked great. And we contacted the VNA and we said we'd like to start a community garden. And they said, Really? They're. Are you sure? And we said, Yes.

April [Host] [00:14:55]

She explained that there was some skepticism at the beginning about whether the garden would be successful. And it was.

Community members showed up enthusiastically to bring life and lots of fresh food to the formerly dilapidated site.

Jess Hyman [00:15:10]

So after that, they leased this the site, which is, I don't know, the property... I mean, it's got to be at least a quarter acre, I'm guessing. So they leased it to Grow Team ONE, Grow Team Old North End, which was the community group that started the garden, leased it to us for a dollar a year. And when we handed them their dollar, they handed it back and said, here's a donation.

April [Host] [00:15:31]

Given the site's previous land use, I was curious what the deal was with the soil and asked us if any soil testing had been done prior to them putting gardens in the space.

Jess Hyman [00:15:41]

Absolutely. So, so a good thing to know is that the garden site so way back when it was an auto repair shop, it had all this all this cement had been removed and clean fill had been added to the site.

So there was I'm not sure how much like maybe a foot, foot or two of clean soil that had capped the site and all the raised beds that you see now, all the all the gardening that's ever been done in the site has been in raised beds with clean, fresh dirt brought in with, and when we started, we put a semi permeable layer of landscape fabric underneath so that water could go through, but things couldn't come up.

[Music]

And so, you know, this is an urban garden. And in any type of urban garden, you have to be really careful about soil quality growth.

April [Host] [00:16:22]

Grow Team Old North End or Grow Team ONE, continue to steward and manage the land. And as the garden continued to grow, they worked with the city to incorporate it into the city's community garden system. In doing so, they also helped create a new designation of community garden, the neighborhood garden.

- Jess Hyman** [00:16:39] This garden, as well as the Riverside neighborhood garden, which is another garden that Grow Team ONE started and then another garden started by a different group of volunteers a few blocks that way, the Myrtle, Myrtle Street Avant Garden.
- April [Host]** [00:16:51] Which as a side note, we talked about in episode one.
- Jess Hyman** [00:16:54] All of those became neighborhood gardens under the city system, which gave them a lot more resources.
- After that, the city wanted to purchase the land because it was this incredible space and in as part of the purchasing of the land, that's when a lot of the deeper soil issues emerged.
- April [Host]** [00:17:10] As part of the city's purchase agreement, which used money from the Conservation Legacy Fund and the Vermont Housing and Conservation Board, they had to do a much higher level of environmental and soil testing than had been done previously.
- [Music]**
- An environmental site assessment indicated that soils on the site contained levels of Polycyclic Aromatic Hydrocarbons or PAHs, lead and arsenic in excess of the residential Vermont soil screening values. Perchloroethene or PCE is a type of chlorinated, volatile organic compound, and it was also detected on shallow vapors on portions of the property. Here's Jess again.
- Jess Hyman** [00:17:47] That triggered the need for a large scale remediation. The whole site was scraped, several feet of soil was just scraped away.
- April [Host]** [00:17:57] All the raised beds built by garden volunteers and remaining infrastructure on the site was removed.
- Jess Hyman** [00:18:03] Yeah, it was it was interesting because for the gardeners who had been at the site, obviously it limited their access to the site for a period of time when the remediation was happening.
- So there was there was some concern about, oh yeah, we're losing our garden space. But at the same time there was the understanding that this is for the greater good and we're going to have healthier, safer garden for the long term.
- April [Host]** [00:18:22] A remediation of the scale we're talking about means trucks in and out of the neighborhood, work crews there regularly. Approximately 320 cubic yards of contaminated soil were removed

and disposed of and then a clean soil and filter fabric cap was installed over the entire property surface.

It's no small feat. and in the residential neighborhood, that's got to draw some attention. I asked Jess in a follow up phone conversation whether she thought awareness about the soil contamination in Burlington was raised due to the scale of the remediation.

Jess Hyman [00:18:57]

The scale of the Archibald Remediation project obviously drew attention to the issue and they got people talking and thinking about what does that mean for the soil in our and other gardens or the soil in the park or my kids place or the soil, my backyard, so it did get people thinking more about that.

And I think it may have not felt as relevant too because it was such a big project that it might not have felt relevant to smaller scale or home gardeners.

[Music]

So I think that it's, you know, what was more, what was more important than that big project was just the ongoing information and outreach that Grow Team ONE, along with Friends of Burlington Gardens and Vermont Garden Network and other other local groups and organizations. You know that ongoing information that was always shared about soil testing and safe growing in urban areas.

April [Host] [00:19:55]

Access to information about safely growing in urban spaces is incredibly important. As we heard in episode one. There was a huge uptick in community gardening that happened during COVID. Research out of UVM also showed that home gardening spiked in popularity as well.

And while it's awesome to see people wanting to get involved in the growing of their own food, folks new to gardening might not be taking precautions if they're unaware about the history of the soils they're gardening in. Jess brought up another good point about access to information and resources.

Jess Hyman [00:20:28]

It's one thing to say, Oh yeah, if you have contaminated soil, it's easy. You just build a raised bed, fill it with clean dirt, and you're good to go. But what happens if you can't afford to buy? There has been materials on the clean soil or can't get those materials to your home or are there other constraints?

And so we wanted to make sure that people have access to information and also, you know, about what about alternatives, but also, like, do you get free stuff? How can you build a raised bed for

cheap? You know, what organizations could donate to donate things? Where where can you get free seeds to offset the cost of maybe having to purchase some other soil?

So that that was really important to us to to make sure that it wasn't just the people who could afford to to buy all these things, who could have access to good soil and fresh, healthy food.

[Music]

April [Host] [00:21:22]

People garden in Burlington for a variety of reasons. Gardening is done by some as a leisure or pleasure activity by others for their health and by many because it's economically necessary.

Here's Megan Humphrey again, who is also the director of the nonprofit Helping and Nurturing Diverse Seniors or HANDS for short, which works to provide seniors who struggle with food insecurity, fresh, healthy food.

Megan Humphrey [00:21:47]

In Vermont, we're at the highest rates of food insecurity since even during COVID. So it's it we're at the worst level right now. So I feel as though, to me, food is a right. Not everyone necessarily agrees with that, but I think that it is a right.

So I'm very concerned that we're not spending enough time and energy and resources on making sure that people have healthy food and fresh food. So it's not it's not just going to the market and getting getting a bag of chips, but it's also really looking at how people can either grow or have access to healthy food.

April [Host] [00:22:25]

While community gardens don't hold all the answers to solving issues of food insecurity. They are certainly a piece of the puzzle.

And in Burlington, where soils across the city are questionable, they have an even more important role to play in providing a safe environment where people have the opportunity to grow fresh, healthy food.

If you are a gardener in Burlington and are worried about your home soil or the soil where you garden. Sending in a soil sample through the UVM Agricultural Testing Lab is relatively cheap and easy. \$15 for a basic soil sample with another \$10 if you select the heavy metal screen, and the master gardeners at UVM Extension will help you to interpret results and answer any questions you have. A link to their website can be found in the show notes.

[00:23:18]

Next time, join me for some remarkable stories of growth, connection and learning. We'll hear from a handful of current community gardeners to get a sense of who the Burlington gardens serve and what brings people back year after year.

[Theme Music]

[00:23:42]

A big thank you to Jess Hyman for her dedicated years of service to the gardening community and for taking time out of her busy schedule to speak with me. Thank you to Vince Feeney for having me at his home to talk about all sorts of Burlington working class history. And lastly, thank you to Megan Humphrey and Aloyse Rowley for offering up their time to tell me their stories. See you next time.

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Appendix C: Episode 3. Culture

The Gardens Nearby- Episode 3. Culture

[Soundcloud](https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-3-culture) - <https://soundcloud.com/april-mcilwaine/the-gardens-nearby-episode-3-culture>

[Spotify](https://open.spotify.com/episode/2HA0wVAXQYfZWHQWVX31FT?si=8185b6282c1a4f84) - <https://open.spotify.com/episode/2HA0wVAXQYfZWHQWVX31FT?si=8185b6282c1a4f84>

The Gardens Nearby

Hosted by April McIlwaine

Episode 3. *Culture*

April [Host] [00:00:00]

Jim Flint, his wife and two kids, all got involved when it came to the yearly community garden work projects.

Jim Flint [00:00:06]

You know, it would have been easy just to have a tractor out there to, you know, dump the compost wherever you needed it to be. But we didn't have a tractor and we had people and so and we had five gallon buckets.

So whenever we would have, you know, a work day, whether it be to build the community teaching garden with I don't know how many yards of compost we spread there by hand or the Childrens Discovery Garden or out at, you know, any one of a number of different places, you know, we would do bucket brigades.

And it was everybody together, you know, And you have to you get that rhythm. And, you know, we would do it with wood chips we would do it was with compost. And even the littlest kids could help out. And one way or another, and pretty soon that big pile of compost was all spread and you had this great sense of satisfaction and you got that shared sense of, I think, building social capital in a fun way.

April [Host] [00:01:06]

Jim reflected fondly on his 25 years as a community gardener, as he has since moved and is no longer living in Burlington.

Jim Flint [00:01:13]

You know, these different work projects, those were the funnest times for me. You know, just, you know, people would come out okay, there's all these different things to do. And you'd have, you know, a bunch of stuff happening at once and then a couple of hours get a lot of work done and and that was you know, that was the people power, you know, that that just

just I you know, I loved it, you know, we we certainly wore out lots of cars hauling garden stuff around.

[Intro Theme Music]

But I but it was it was all worth it. It was really it was really just, you know, just a you know, moment moments of time that you had never forget.

April [Host] [00:01:56]

Why gardeners come back to these community plots year after year depends on the person. For some, it's the unbridled joy that comes from eating a freshly picked veggie. For others, it's perhaps more of an economic decision.

Whatever the reason may be, the stories you're about to hear of gardeners who return time and again, help us to understand a bit more about the importance of community gardens and why we must continue to push for increased access to these spaces.

I'm April McIlwaine and this is episode three of the Gardens nearby. This is the final episode of this series where we've investigated the central question: How has soil contamination impacted community gardening and those that want to grow food in Burlington, Vermont?

In episode one and two, we heard how trends around gardening have ebbed and flowed over the past 150 years. We've heard stories of how development and loss of open space has impacted community garden sites and how the history of soil contamination in Burlington has further complicated gardening on the soils that are available. If you missed them, I'd recommend flipping back to listen.

Pivoting from stories of the past to hear from current gardeners. I'll introduce you first to Dave. I'd let him introduce himself, but when we met I got so excited to get going with the recording I forgot to have him do an introduction.

Dave Frances is a chef by trade and has worked in a variety of culinary professions. He has also been gardening at Starr Farms since 1996. He explained to me part of why he got into gardening in the first place.

Dave Francis [00:03:42]

I mean, I moved in on it early because it was some way to escape to the bullshit of life, like school, you know, those requirements about school and and requirements at home. And all that kind of stuff so after school, I'd go right into the garden

for a while just to chill out or decompress or whatever adult words you might want to use.

April [Host] [00:04:06]

All the food grown in Dave's community garden is either used fresh or stored and used later in home cooked meals.

Dave Francis [00:04:13]

I grow some tomatoes like a heritage kind, one kind like Brandywine, for instance, and some tomatoes that I can dry. And then, you know, I try to you know, there's some some zucchini like a couple of those, maybe an eggplant or two.

April [Host] [00:04:37]

But beyond the delicious vegetables growing in his garden, what struck me in many of his stories was his innate curiosity, his interest in experimentation, and the way gardening was an outlet for experiential learning. He told this story about wanting to learn more about pruning fruit trees.

Dave Francis [00:04:55]

I think I tend to learn by, you know, seeing and doing. I mean, I'm okay reading, but if I have an act-, if there's an activity attached, then that works out pretty well.

And so I took a workshop down at Scotts Farm in southern Vermont, and then I took another workshop through. It wasn't a particular agency, it was just a gentleman who was trying to teach veterans, had a had a farm for themselves. I'm not a veteran necessarily, but so he had he brought in somebody to show us how to, the workshop, how to prune. And also that's where I learned how to, you know, take a clipping off of a shrub and then deep six it in and it grows like that.

And so at the community garden out at Starr Farm, that's how I do my all my volunteer hours is through the winter, I prune the trees.

[Music]

April [Host] [00:05:55]

In addition to telling me about pruning trees. He told me about learning how to make his own compost, about his transition to no-till, which is a practice that helps to build healthier soils. And about his use of Hugelkultur, a centuries old method of building a garden bed from rotten logs and plant debris.

It was fascinating and such a clear reminder of the way gardens are able to act as educational spaces and resources. No matter your age and no matter the amount of time you've been gardening.

April [Host] [00:06:32]

Aloyse Rowley is another gardener who deeply values the learning aspect of gardening. Though she grew up helping in her parents gardens, she decided to pursue a degree at UVM in foreign language and worked for many years as a teacher's aide and at Mount Abe in their language labs.

In her older age, she has reconnected with gardening in a big way. Not only does she have a small pollinator garden at her apartment building, she's held a community garden at the Archibald Neighborhood Garden for many years, and gardens regularly in summer months through the CORE Adult Center, a program of the Parks and Rec department.

Aloyse Rowley [00:07:09]

Everybody says, oh, you're really good at it. And I'm like, thank you. I think it's a continual learning experience because I, I feel like its same thing with life, just learning all the time. So gardening seems to be too, because I learn more about the environment and learn more about what I need to do in my garden to help the environment. You know, as much as I can, I try to ask questions.

April [Host] [00:07:36]

One thing Aloyse told me she has been excited about recently is experimenting with growing and preparing new foods. In the past Aloyse has received the fair share gleaning CSA from the Intervale.

When she would go to pick it up, there would often be cooked samples available for tasting provided by the folks at the Vermont Garden Network. Recipes on how to prepare the items in the box were included as well. A quick note that in this next quote, Aloyse didn't realize at the time, but Cedar prefers they/them pronouns.

Aloyse Rowley [00:08:09]

There's a gentleman named Cedar this year and he has come over with Carolina and he brought samples. He cooked things and brought samples and he answered the questions that we had. And he was such a good cook.

[Music]

It's like I'm trying new things now that I had never tried because he was there doing those things.

April [Host] [00:08:32]

She said she's now inspired to try growing a few of the vegetables she's received. Armed with new and delicious recipes, she said she's even changed her mind about certain vegetables like brussels sprouts.

- Aloyse Rowley** [00:08:45] I was telling him I didn't like them because they tasted bitter, he says. You know what I do? He says. I bake them and I put a little bit of maple syrup on them. So I tried it. Put some maple syrup on it and I was like, I like these.
- April [Host]** [00:09:00] One of the great things about community gardens is that for some people, a plot may provide exciting opportunities to try new things, while for others it provides space to grow culturally important foods that feel like home.
- April [Host]** [00:09:18] Over the past 30 years, an estimated 8000 refugees have settled in Vermont, with a large percentage of that number living in the Burlington and Winooski area.
- The Association of Africans living in Vermont, or AALV is a program located in the old North End to help new Americans from around the world smoothly transition to life in Vermont. One of their programs called New Farms for New Americans is a community based gardening and agriculture program.
- [Music]**
- For many refugee and immigrant families, they arrive with deep, culturally rooted experiences of farming. But once here, they don't always have easy access to land and resources to continue their agrarian traditions. Through this program, families are provided garden allotments to grow fresh and culturally significant crops, as well as have a space to connect with others.
- [00:10:13] I spoke with two gardeners who came from farming families in an area of Bhutan that was ethnically Nepali, exiled from Bhutan in the early 1990s due to strict laws designed to target ethnically Nepalese people. They fled to eastern Nepal, where they lived in refugee camps.
- [00:10:33] Bishnu Khadka works at UVMs Medical Center as a personal attendant and has lived and gardened in Burlington since 2008. His parents arrived in Burlington shortly before him and quickly were hooked up with gardening space through the New Farms for New Americans program.
- When Bishnu arrived, he joined his parents at the gardens and has now had a garden every year since. I met Bishnu at the AALV center in the Old North End and asked him about the community aspect of gardening at his site.

Bishnu Khadka [00:11:06]

I feel like it's the place where you can share your cultures through your garden. You don't have to say you are Hindu or you don't have to say you are Buddhist or you don't have to say you are Christians.

When you find the people working in the garden, they work according to their culture, how they are grown, how they are, how they are upbringings when they are small, how their parent has done their job. You know um, some Vietnamese people are there, some African peoples are there, some Nepalese people out there, you know?

And then when we all work together, when you see you can see different types of vegetables growing, even if they are growing the pumpkins their way of making a bed is different than what I am doing. I have a different ex-, but later on the, the pumpkin will grow. The pumpkin, It's not a pumpkin will give you something different. But the way how they are practice it, it's amazing. It's amazing.

April [Host] [00:12:03]

One of the points Bishnu stressed to me was how important keeping a garden was not just for the production of food, but for his and his parents well-being.

[Music]

Bishnu Khadka [00:12:13]

I would say the most beautiful thing way I am doing in gardening is my Mom and my Dad. Actually, my dad is not able to do anything in a garden at least he like to go and walk because he is both the knees are replaced. He cannot bend his knees.

My mom also has a back surgery and it's a pretty severe surgery and she is every time when I go she wants to go. This garden becomes a mental therapy for my mom. And I will do this garden and I make my mind and I said, I will do this garden as long as my mom is able to go in a garden because that's helping her.

April [Host] [00:12:59]

He explained to me that because his parents don't speak English, they are dependent on others in the community every time they leave the house. That is, except when they're in the garden.

Bishnu Khadka [00:13:11]

They can be a king when they are going, when they're in their garden. You don't have to say anything to them. You go and

ask them. Even they don't understand your language, but they understand your action.

April [Host] [00:13:23]

Joining his parents in the garden, Bishnu has witnessed the effect it has had on their health.

Bishnu Khadka [00:13:29]

And growing vegetables definitely it's a plus point, eating your fresh vegetables it's another plus point. Better than that, more than that is it's a physical, physically, mentally therapy for the people.

So many people, not only it's just my personal experience, but also I have seen in my Nepali community people, whoever is working in their in their garden, they are just barely walk with their stick, even they are going down there with their, what do you called, walker.

[Music]

But as soon as they are in their soil, they are there dragging themselves into the soil. They're digging and they're playing they grow vegetables. It was it was an amazing and beautiful place to be in a summer. I wish I can grow vegetables all, whole year.

April [Host] [00:14:23]

In addition to the gardens being a place where Bishnu and his parents can reap the health benefits of gardening and foster connections with other gardeners, he explained how having garden space allows him to grow a very important food.

Bishnu Khadka [00:14:37]

The habanero that you guys grow in this country is like, so hot.

April [Host] [00:14:43]

Really.

Bishnu Khadka [00:14:44]

This habanero here, American habanero, so hot. It has a strong smell, skinny skin more hollow inside, too hot. But the habanero that we grow. I can eat two of them.

[Music]

April [Host] [00:15:05]

This may not sound like a big deal to some, but having access to culturally appropriate food is something that researchers are increasingly understanding is necessary for food security.

During the pandemic, the Vermont Food Bank put together produce and food boxes to distribute to those in need. However, research out of UVM by Pablo Bose and Caroline Gilman, an alumni of the Food Systems Master's program, found that a substantial amount of food being delivered was not

being taken or used by the New American community. Many of the staple ingredients delivered in the boxes were not their preferred foods or even foods they knew how to cook or prepare.

Bishnu has saved seeds year after year from the Nepali variety of habanero that is added to so many of his cultural dishes, and he's now working with Red Wagon Plants, a local plant nursery to get his peppers growing earlier in the season.

Bishnu Khadka [00:16:05]

This year I'm going to go in their greenhouse and they have given me an opportunity that I can plant my Habaneros a tray of habaneros in their greenhouse because they started from the beginning of January. So if I started doing from the beginning of the January seed just them in January, February, March, February, March, April, May, June, I have all four months time to prepare my plants ready. So that will be my all habaneros.

April [Host] [00:16:41]

And because these peppers can't be found at regular grocery stores here, there is high demand for them.

Bishnu Khadka [00:16:47]

So Habaneros is only one of the vegetables that you can sell and earn a lot of money. All the people in in my, in this communities, there are so many people, friends to whom they work with me they always want the habanero, I can sell. I sold a couple of zip locks last year. I think I sold ten of them at least a pound each, you know one, one zip lock.

April [Host] [00:17:14]

These habaneros are just one of many culturally important crops being grown in the new farms for new Americans seven acre plot. Bishnu explained the nature of sharing he has experienced at the garden.

Bishnu Khadka [00:17:26]

It's a lot of happiness when we share, and I know my neighbors, whoever is next to me.

[Music]

When we had a class training, all different people come together for the training and when we had a field trip, we go each and every garden. I today I invited in my plot, hey, let's go into my plot. And they ask all the questions, how I grow the vegetables and I explain them the way how I grow.

And when I go to the next two days, like Vietnamese people's garden and they explain the way how they grow. And so this is the type of garden when where we can share the ideas and so many different even vegetables.

- April [Host]** [00:18:27] For Bidur Rai, coming to Vermont was not an easy transition.
- [Music]
- While living in Nepal, he taught high school and went on to earn a degree in English at a local university. He also taught and trained in karate, competing in tournaments in India and Nepal.
- Despite being a skilled fighter, he sustained injuries from the sport and suffered swelling and numbness in his lower limbs, which left him unable to walk. He resettled in 2015 to Burlington in part to seek better medical treatment.
- Bidur Rai** [00:19:02] In 2015, when I came here. Most of my friends know, western people's friends as well. They know how I was when I came here. I used to feel that I am helpless now. I don't have anything. I can't do anything.
- April [Host]** [00:19:16] With access to a doctor here, he had held out hope that he would get better. However, doctors were unsure he would make progress.
- Bidur Rai** [00:19:26] When I heard that when I heard that I was the person who was very sad and everyone was encouraging me. No Bidur, that's fine. Just go ahead and get, apply for disability benefits, Social Security benefit.
- April [Host]** [00:19:40] Though friends and family were intending to be supportive, he did not want to take a handout and wished to make his children proud.
- Bidur Rai** [00:19:47] And I told them please give me a job because I can read, I can write, I can still let someone understand me and speak. I don't want to be back paralyzed and receiving the, raising my hands to receive the benefits now.
- April [Host]** [00:20:01] Through persistence and determination, he began to see improvement in his mobility.
- Bidur Rai** [00:20:07] But I tried my best. A year later, I was able to walk with a walker. After standing I can walk with walker.
- [Music]
- And I told my friend I want to do something, take me to the garden. I can sit down I can plant I can take those who know

unwanted grasses and throw it away. I can slowly plow the fields. I can take, do something, take me to, take me there.

April [Host] [00:20:36]

The garden became a place where Bidur was able to contribute to his family and his community. He explained that in Bhutan, growing food was a very community oriented practice where everyone helped everyone else. Being in a community garden felt similar to him in that way.

Bidur Rai [00:20:55] When I started gardening there, there were a lot of other Nepali peoples who I know since back. Whom I know, knew them from back. So they came to me, "Sir, sir do I need to do anything? Can I help you with this?". Mostly they comes to me, but before when I was not able, I used to ask a lot of help from them. But now, these days, not only them, I used to go and ask them, "do want to be with you for some time? I can spend some time. And they say, "yes, why not?". And we share like that still like in back in Bhutan or Nepal like that, sharing the work. And not only, you know working, we just exchange the seeds of the plants as well.

April [Host] [00:21:41]

Over the years, growing food in the gardens and saving seeds has made a huge difference for his family.

Bidur Rai [00:21:48]

When we started doing that, more than half of the Vegetables we don't buy it, we just preserve it in the freezer. And that is how after five years later we are here buying our own home, that is also, you know, big difference in saving. We don't think that, you know. Oh, how much it will be if you save \$10 or you know, \$200 or \$500 per month. What you will get by keeping that money, but that makes huge difference.

April [Host] [00:22:23]

But realistically, money is only one part of why he continues to garden.

Bidur Rai [00:22:28]

People still tells me, Hey Bidur, you are working your son is working your wife's working, you are making so much money why you coming to the garden? How much you will save? You know? Instead of working here you can just go and get it from the store.

[Music]

But I love doing that. I have some, you know, relationship with that. Not just with money. I can meet with my old peoples and ask them, Hey, father in law, what is there? How you doing? I love talking with them. I love hearing their story.

Even some of the old people. Grandpas, when I ask them, do you still remember of Bhutan what you are doing? They says I every night I [inaudible] to Bhutan and I used to ask them to sing. What type of song you used to sing in the village while working? And they sing, they start singing. I love hearing them. Those are other things which I, which I love going to the garden.

April [Host] [00:23:26]

Connection to others has resoundingly been brought up by gardeners I've talked to as a reason to keep coming back to these spaces. For Gina Clithero, who started gardening during COVID. That has certainly been the case.

Gina, who graduated from UVM in 2018 and now works with the Vermont Agency of Agriculture Food and Markets, reflected on getting her first community garden during the summer of 2020.

Gina Glithero [00:23:55]

I sense a sense that like a lot of people, summer 2020 were like really yearning for connection with each other. And that was that was the summer, yeah, that I do feel like I was most connected with my neighbors at the community garden plot too.

April [Host] [00:24:13]

She explained how through the isolation so many experienced during COVID, her garden had become a much needed getaway.

Gina Glithero [00:24:21]

I was working from home and I was like totally driving myself mad and sitting in my bedroom that was also my office. And I'd be like, You know what? I actually really need to water today.

So I'd like, get up and go on my lunch break and be able to, like, have that respite from. Just work, which is like so much of what I was doing at that point without social interactions and, yeah, it was it was definitely a really wonderful place to have during COVID, especially early COVID days, which were particularly isolating.

April [Host] [00:25:03]

As a gardener that is newer to the scene. I asked, Gina, what she felt the most valuable aspect of being in a community garden setting had been so far.

Gina Glithero [00:25:12]

I think like meeting new people and just being around people is one of the coolest parts about it.

[Music]

You know, I've been in Burlington since college and you don't get as many opportunities to meet new people after graduating. So it's a nice space to meet folks. And also, it's nice to be just a little active it's like a nice physical activity. I don't know just slowing down, enjoying the outdoors and feeling connected to the weather.

Yeah. I think the thing about I think what I really loved about being at the Intervale was like there were people there all the time. Like any time I went, there would be somebody else at their plot too. And it's just cool to be a part of something and to have the opportunity to connect with people.

April [Host] [00:26:08]

While Gina has lived in Burlington for eight years, four of those years were during her UVM undergrad program and another three have been during weird COVID pandemic times. She explained that she hasn't exactly felt grounded and that securing a community garden site and this year a more permanent no till site has felt a bit like a pivot point.

Gina Glithero [00:26:30]

I don't know. I think like for me, having a garden plot that I'm tending to kind of represents the sense of like settling somewhere and like taking root somewhere. And so, it's something that I'm it's something that I'm excited about, like having a no-till plot that I might end up tending to for... Maybe it'll just be a year, but maybe it'll be five years. Maybe it'll be... Who knows how long?

[Music]

April [Host] [00:27:01]

People garden for such a diversity of reasons, and all of them are important. Not only do community gardens allow for food production and land stewardship, they promote community engagement and socio-cultural connection. They provide an educational resource and have countless ecological benefits to the neighborhood.

They are also safe garden spaces and an invaluable resource for residents across the city who don't have access to land or can't garden in their home soils.

[Theme Music]

I'll leave you with this last quote that beautifully sums up the value of these spaces from Jess Hyman. Archibald Community Garden organizer and former director of the Vermont Garden Network.

Gina Clithero [00:27:53]

The main thing is just to understand the beauty and the value and the complexity of these spaces. You know, they fill so many roles in our community. It's not just about food and it's not just about, you know, the the it's about the place, but it's also about the people and the connections that are made and about the opportunity that that comes along as well.

Food is a great equalizer. We all eat. And the more that we can recognize the things that we have in common and the things that we can do together, I think the stronger our community and society will be.

[Theme Music]

April [Host] [00:28:37]

If you're not a current community gardener but would like to get involved with the Burlington community gardening scene. Keep an eye out for volunteer opportunities and community work days through the Burlington Area Community Gardens, the City Market Co-op and the Vermont Garden Network.

If you're interested in implementing a community garden in your neighborhood or want some more information about what that process might look like. Contacting Dan Cahill, the land steward for Burlington Parks and Rec, or Megan O'Daniel, The Community Garden and Parks Outreach Coordinator is a great place to start.

[00:29:12]

A link to more information and application for the Conservation Legacy Fund, which we learned in episode one and two can be used for open space land acquisition can also be found in the show notes.

A massive thank you to Bidur Rai for inviting me into his home and telling me his incredible inspirational story. To Bishnu Khadka for making time to speak with me and for sharing his journey and enthusiasm for gardening.

[00:29:49]

Thank you to Dave Francis for sharing his curiosity and inquisitive nature with me to Aloyse Rowley for her giddy excitement that still exudes as she talks about gardening. To Gina Clithero for being so honest in sharing the trials and tribulations of gardening. To Jim Flint for his joyful stories of his time as a gardener. And lastly, to Jess Hyman for her time and immense knowledge of community gardening.

And thank you listeners for joining me for the last three episodes. My name's April McIlwaine and this has been The Gardens Nearby.

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Appendix D: Introduction Letter to Participants

Dear,

My name is April McIlwaine and I am a graduate student in the Food Systems program at UVM. I am writing to you to invite you to be a part of an oral history project I am conducting. This project will center the stories and life experience of Burlington residents and gardeners to more deeply and holistically understand the history of the Burlington Area Community Gardens. Oral histories are often casual and conversational with open-ended questions. While I am interested in a range of topics including your history and connection with gardening, your time as gardener with BACG, your gardening practices, values and relationship to food, we will likely talk about many other things and I encourage you to bring up topics passionate to you.

Should you choose to participate, we will set up a time to conduct an initial interview lasting 60-90 minutes. A follow up interview may be conducted as needed. Your participation is completely voluntary and you are free to change your mind or stop participation at any time. These interviews will be conducted at a time that suits you, I am happy to work around your availability. We can plan to interview in person at your home or in a location that suits you, while walking around your garden, or if you are more comfortable, over Microsoft Teams.

With your consent, the interviews will be recorded and archived with the Vermont Folklife Center in their unedited form. A release document with your wishes as to the use of the recording will accompany it. I will also be producing a narrative podcast that will explore Burlington's community gardens as they relate to food sovereignty. With prior consent clips of interviews may be featured. Any clips identified for the podcast will be shared with the narrator prior to their usage to ensure the context and message of the story remains intact.

I am happy to answer any further questions you may have and can be reached by phone (802)585-0622 or by email at april.mcilwaine@uvm.edu. I appreciate your time and look forward to hearing from you.

All the best,

April McIlwaine

Appendix E: Interview Consent and Release Form

Thank you for agreeing to share your story with April McIlwaine and her (currently untitled) Masters Project. This project is a part of research to fulfill requirements for a graduate degree in Food Systems at the University of Vermont. The purpose of this research is to create a publicly accessible narrative exploring the impact soil quality and contamination may have had and/or continue to have, on Burlington's residents interested in growing food. The final podcast and oral histories collected for this project will be archived with the Vermont Folklife Center, and will be publicly available for use by researchers and the public, unless you indicate otherwise. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent researchers' unpublished or published work. The interviewer affirms that she has explained the nature and purpose of this oral history project. The narrator affirms that he/she has consented to this interview.

- ❖ I consent to the following uses for my oral history interview:
 - Archive in the Vermont Folklife Center: Yes ____ No ____
 - Audio/written transcripts available to the public: Yes ____ No ____

- ❖ At the following date or occurrence:
 - Access by qualified researchers Yes ____ No ____
 - Publication in electronic form (eg., podcast on a website) Yes ____ No ____

- ❖ I request the opportunity to review & revise the transcripts of my interview: Yes ____ No ____

Other restrictions as detailed herein:

Interviewer: _____ Date: _____
 Narrator: _____ Date: _____
 Print Name: _____ Date of Birth: _____
 Address: _____
 Telephone: _____ Email: _____

Any questions may be directed to April McIlwaine, (802) 585-0622 or april.mcilwaine@uvm.edu

Appendix F: Example Gardener Interview Protocol

Opening

Thank you so much for agreeing to interview with me. As we talk, feel free to stop me at any time or request that we skip a question.

To begin...

- Tell me about your earliest memory in a garden.
 - a. Was gardening a part of your upbringing?
 - b. Was there a figure in your life that inspired you to continue gardening in your adult life?

Personal History

- Where are you from?
 - a. What brought you to Burlington?
- Can you situate Burlington for me at the time when you joined the garden?
 - Politics
 - Economics
 - Trends
 - Community needs
- What led you to join a community garden in Burlington?
 - a. Did you have access to a garden space where you were living?
- What benefits have you experienced being a part of a community garden?
 - What is your favorite thing about being a community gardener?
- Tell me a story about a conflict or challenges you have experienced being a part of a community garden?

Education

- Where did you learn how to garden?
- What resources have you accessed?
 - People
 - Books
 - Events
- How do you continue to get information around gardening?

Gardening Practices

- Tell me a little bit about what you do to prepare a garden bed for planting.
- How do you care for and manage your garden throughout the season?
- What are your favorite foods you grow in your garden?
- What has grown well/ grown poorly in your community garden beds?
- How do you prepare your garden for the winter?

To finish up...

- Any other stories or memories you would like to share?
- What are your hopes for the future of the Burlington area community gardens?
 - Any concerns?
- Anyone else who you can think of that would be open to speaking with me?

Appendix G: Informant Interview Protocol Example

Interview Questions for Meghan Humphrey

1. What does your job entail?
2. Can you describe for me the hierarchy of management and coordination that exists from gardeners up to city office?
3. What do gardeners agree to when they sign on? Has this changed over the years?
4. Are there yearly evaluations or needs assessments that take place?
 - If a need is established what is the process for addressing it?
 - Has this process changed over time?
5. Have you noticed any notable trends in who is gardening over the years?
 - Any changes in gardener enrollment or demographic make-up of gardeners as a result of Covid-19?
6. When evaluating new spaces for community gardens what is the criteria that is looked at?
 - Neighborhood demographics?
 - Site history?
 - Community interest?
7. Are there other city offices or regulatory offices that need to sign off on a space before it can become a community garden?
8. What role does the city play in educating gardeners about things like soil, pesticides, etc?
9. Future of BACG!
 - Where do you hope to see areas of expansion?
 - Goals for community involvement or specific demographics you hope to reach?
 - Other priority areas?

Appendix H: Project Participants and Perspectives

Name	Role	Perspective	Gardening	Soil health	Contamination/ Environmental Clean up	Human History	Land Use Change	Land Use Practices	Food Access/ sovereignty
Aloyse Rowley	Community gardener	Experienced gardener, elderly	x	x		x			
Bidur Rai	NFNA gardener, cultural knowledge of gardening	New American gardener	x			x			x
Bishnu Khadka	NFNA gardener, cultural knowledge of gardening	New American gardener	x	x		x			x
Dan Needham	Manager, Agricultural and Environmental Soil Testing Laboratory	Scientist, farmer		x				x	
David Francis	A 30-year community gardener at Starr Farm and chef	Experienced gardener	x	x		x	x	x	
Dona Brown	Vermont History, back to the land movement - UVM History Department	Historical				x		x	
Gina Clithero	Vermont department of Agriculture food and markets	Young gardener	x						
Jess Hyman	Was involved in the Archibald Community Garden remediation efforts in 2007, former executive director of VGN	Gardener and Organizational	x	x	x	x	x		
Jim Flint	Historian and former BACG member/ board member	Gardener and Organizational	x	x	x	x	x	x	
Maggie Standley	Myrtle st garden implementation,	Organizational, accessibility	x				x	x	

Megan Humphrey	accessibility Original Parks and Rec coordinator and Director of non-profit Helping and Nurturing Diverse Seniors	Historical, food systems	x		x	x		x
Meghan O'Daniel	City of Burlington Parks dept Community Garden Outreach Coordinator	Organizational, City of Burlington	x	x	x	x	x	
Vince Feeney	Burlington historian of working class history	Historical			x	x		x

Appendix I: Flier for Community Event #1

Phytostabilization of lead using sunflowers

By April
McIlwaine

For many years it was believed that sunflowers had the ability to remove lead from contaminated soil in a process known as phytoextraction.



Sunflowers are excellent at "sucking up" a variety of contaminants like arsenic, nickel, or PAHs but lead is different.

New research released in 2020 found that lead can't be removed by sunflowers. However, sunflowers have specific mechanisms that allow them to hold lead in place under the soil. This is known as phytostabilization.

Phytostabilization prevents lead from becoming airborne, keeping us safe. Plant a sunflower for your community!



Note: Do not eat sunflowers planted in leaded soil

Sources: Egendorf, S. P., Groffman, P., Moore, G., & Cheng, Z. (2020). The limits of lead (Pb) phytoextraction and possibilities of phytostabilization in contaminated soil: A critical review. *International Journal of Phytoremediation*, 22(9), 916–930. <https://doi.org/10.1080/15226514.2020.1774501>

Appendix J: Flier for Community Event #2

Page 1:

Urban Soils in Burlington, VT

Whether you are a home gardener or a community gardener soil testing is a great way to start learning more about what is in your soil!

By April
McIlwaine



Lead in Burlington soil

- Lead is a prominent heavy metal found throughout Burlington because:
 - a. Lead was present in many house paints before 1978
 - b. Cars used to use leaded gasoline up until the 1970s when it was phased out¹
- Lead can stay in the soil for **thousands of years**¹
- You can be exposed to lead by working or playing in contaminated soils
- Lead can also accumulate in roots and on the **surface of leaves**

If a test comes back positive for lead there are still lots of gardening options (see the back of this page)!

Soil testing can help you figure out what your plants need to grow!

- Many gardeners add **fertilizer** to their gardens to help their plants grow. However, adding fertilizer is like adding salt to your food, **too little is bad but too much is worse**.
- Soil testing lets you know **exactly** what your soil needs!

Note: Even when using organic fertilizer, too much can kill your plants. Run-off of excessive fertilizer can negatively impact local ecosystems too.¹

Where can I get my soil tested?

- The **UVM Agricultural and Environmental Testing Lab** offers basic soil testing for \$15 with an additional \$10 for heavy metal testing

Its quick and easy!

1. Tychonievich, J., & Kozik, L. A. (2021). Chapter 4: Soil Testing and Fertilizing. In *The Comic Book Guide to Growing Food*. Penguin Random House.

Page 2:

Gardening in Leaded Soil

Raised beds

A raised garden bed can be made in a wooden frame filled with fresh soil.

- Make sure the bed is away from any buildings you may suspect have lead paint.
- Use a layer of landscape fabric or another semi-permeable material to ensure the roots of your plants don't come in contact with contaminated soils.

Note: Be mindful of the wood you are using to construct garden boxes to ensure chemicals don't leach into your fresh new soil!

Container Gardens

Container gardens are a great way to grow food with limited space! They provide a substantial barrier between your plants and contaminated soils.

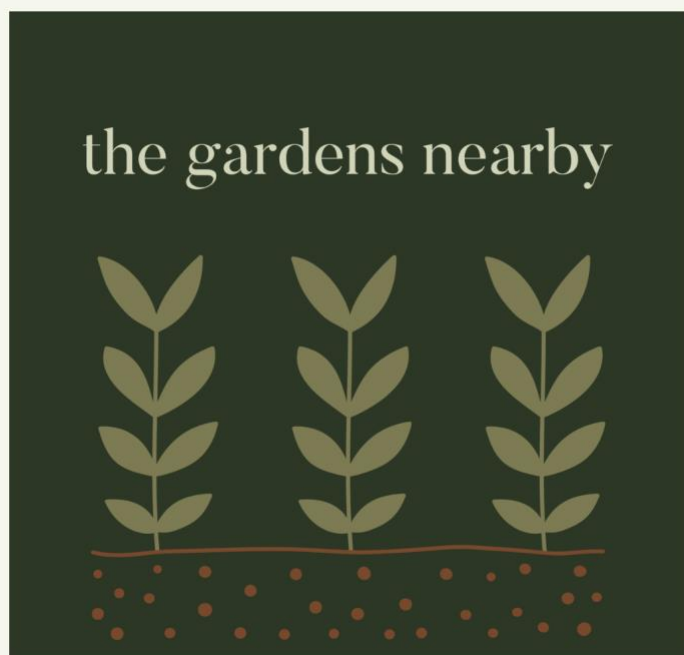
- Make sure whatever pot you are using has good drainage.
- Adding compost or fertilizer may be necessary since most potting soil doesn't have the necessary nutrients for your plants.

Community Gardens

Burlington is home to 14 community gardens managed by the Burlington Parks and Recreation department.

- These garden sites range in size from a kitchen plot (up to 100sq. ft.) to a full size (500-750 sq. ft.) and are located all across the city.
- Visit <https://enjoyburlington.com/become-a-bacg-gardener/> to learn more!

Appendix K: Podcast Tiles



Through conversations with current and past gardeners, historians and city officials this podcast will explore issues of soil contamination, pressures of development and the underlying social history of gardening here in Burlington.

By April McIlwaine, M.S. Candidate in Food Systems, UVM

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