## Map-Making for Marginalized Peoples, Participatory Food-Based Community Organizing

## Strategies and the Decommodified Foodways of Watauga

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#### <u>Abstract</u>

Traditional models of food assistance fail to address the issue of food insecurity in a holistic manner. The giver-receiver transactional model of food assistance rather creates dependencies and serves to pacify a systemic issue that, to solve, takes a fundamental re-ordering of the food system and social-economic relationships to address. The capitalist system, which commodifies food and does not consider food a human right, makes resources inaccessible for many people, especially for minorities and communities in times of crisis. Participatory food asset mapping is one way of mobilizing local communities to highlight free food resources in their area, build relationships, and take initiative to reframe the way the food system is represented. Watauga County, North Carolina is one of the poorest counties in NC with the most wealth disparity and a large number of food-insecure residents and students in the nearby college town of Boone. Yet, the county has a plethora of local and free food resources. This research set out to address the issue of food insecurity in Watauga County, highlight areas of strength within the local food system, and address weaknesses. By getting involved in the Watauga County food system through volunteering for nonprofits, working on farms and gardens, and attending community meetings, I completed participant observation. My involvement then led me to conversations with local food systems experts, which provided me with insight as to what strategies are already being employed in Watauga County to combat hunger and what more needs to be done. It was found that building intentional community around food is one of the most important aspects of community organizing for greater food self-sufficiency. While mapping out free food resources helps build community and create alternative envisionments of community foodways, it is just one step along a grander process towards a movement for food sovereignty.

Keywords: Food Sovereignty, Participatory, Asset Mapping, Community Organizing, Food Assistance, Non-Profit, Watauga County

## **Table of Contents**

Introduction	5
Theory	14
Food Security and Food Sovereignty	14
Participatory Food Asset Mapping	17
Food Justice and Civil Rights	24
Holistic Food Assistance	25
Methods	30
Boone/Watauga Data and Resources	30
Case Selection	31
Purpose of The Study	32
Data Collection	33
Participants	34
My Role As An Academic	35
Limitations Implied in the Study Methods	37
Data Processing	38
Findings	40
Importance of food self sufficiency: gardening,	46
The promotion of food sovereignty as a way to prevent crises	48
Tourism and wealth inequalities	50
Participatory Mapping	55
Discussion	62
Expectations	64
Acknowledgement of Limitations	67
Key Take-Aways	68
Recommendations	71
Conclusion	75
Bibliography	81

# 1. Introduction

This study aims to address the issue of food insecurity in Watauga County, North Carolina through a lens of food sovereignty and community organizing. This study is the first step of a larger project to highlight decommodified food resources in Watauga County through participatory mapping strategies as a possible solution to the problems of food insecurity in the community. Mapping out where decommodified or, simply put, free resources exist in an area is one way to challenge the capitalist economic system that places a monetary value on basic human necessities. The commodification of food—or the process of transforming the social, cultural, or nutritional value of food into a market value—has important social and ecological consequences. As a result of both the commodification of food and land, higher levels of food insecurity arise. This has played out in Watauga over the years as housing prices have become less affordable, which affects food security among students in the college town of Boone and permanent residents of Watauga County. There is more than enough food on Earth to feed everyone, but this food is not distributed to those who need it. Commodifying food encourages ecological exploitation of the land, the implementation of enclosures, and social exploitation of the poor and jobless for profit (Polanyi 1944). By commodifying food, it is reduced to an economic value while the social and cultural value of food is disregarded. It is a human right to have access to food, and it would be unjust to deny anyone access to this human right because they do not have something to exchange for it. Maps of non-commodified resources have the opportunity to challenge privatization and enclosures that work against those without monetary means (Crampton 2018). Mapping alternatives to capitalist economic opportunities and highlighting free resources reflects a preference and sentiment towards alternatives, while the collaborative process of mapping brings communities together around food.

Organizing communities around food is crucial at this moment in history because of the current events—a global pandemic, worsening effects of climate change, and social turmoil—that are largely impacting the poor and marginalized. This study aims to explore alternatives to these systems that do not function for the benefit of people and the land while highlighting local food resources in Watauga County that could contribute to a better people-centered food system. Industrial agriculture, which holds the foundations of the current global food system, is undermining the well-being of the planet and people. Therefore, alternative food systems should be considered. Understanding how to collectively produce creative and sustainable alternatives to the industrial agricultural system is essential to food sovereignty. Learning how to survive as a community, feed ourselves, feed our neighbors, and heal our planet is essential to our futures and food sovereignty. Rather than relying on the goodwill of the world's rich and powerful, building a grassroots movement for more sustainable food systems and community self-sufficiency is the route that appears most promising.

The purpose of this research is to address the issue of food insecurity in Watauga County North Carolina, highlight areas of strength within the local food system, and address weaknesses. Through a community organizing lens, I aim to better understand what free food resources are already available in Watauga County and how resilient these resources are to the social and environmental challenges indicated in the previous paragraph. Although food insecurity is a global issue with a network of intertwined causes, it can be addressed on a local scale through participatory community organizing and mutual aid. Given that charity and other forms of food assistance driven by outsiders cause dependencies and do not address the root causes of hunger, it is important to explore the role of participatory community asset mapping in Watauga as a form of resistance and community self-sufficiency. Mapping out non-commodified food

resources can serve to counter privatization and enclosures that lead to food insecurity in the first place.

In this study, I explored solutions towards building a broader movement towards food sovereignty in my own community, Watauga County, where I am a student at Appalachian State University. Watauga is a university town, Appalachian State University being the college located in the central town of Boone. Many of the food security initiatives discussed in this study are founded by or supported by people within the university. This can be a strength, but also points to a reason as to why these initiatives may have difficulties reaching local populations that are not directly connected to the university. When you step outside of the college campus Watauga is one of the most biodiverse regions of the United States, Watauga is surrounded by a rich temperate rainforest, rolling hills, and rivers of crisp mountain waters. With the gift of a rich natural environment, which has come with the exploitation of logging and coal mining in nearby areas, there is currently a widespread sentiment for environmental protection and recognition of the bounty of local food that comes from the land in Watauga. On the other hand, many people in Watauga struggle with poverty and food insecurity.

In this study, I ask Watauga community members for their perspectives of the Watauga food system, solutions to food insecurity in the region, root causes of food insecurity, and information on what is already being done about these issues. I also consult literature on food-based community organizing strategies and examine participatory food asset mapping as a possible future strategy for Watauga. The scope of this research does not provide a one-size-fits-all solution to the world's food insecurity issue, but simply examines factors that have played out to shape the food scene of Watauga and what can be learned from the strategies of experts and other communities to mitigate food insecurity.

In the early 1970's, Watauga lost 50% of its farmland to outside speculators (Parlow 1978). Before the transition away from farming and self-sufficiency, living far away from grocery stores would not have presented such a large problem since fresh food was available on the land. Those who lost their farmland and try to make the transition to the town of Boone, closer to resources, now face additional challenges. As a consequence of the landscape in Watauga, present-day rural dwellers must travel longer distances to obtain food than those who live near the town-center. Housing prices in town are unaffordable, so many opt for more rural options which presents itself with its own challenges such as poverty and food insecurity. Students who attend Appalachian State University typically need housing in town, which may also contribute to food insecurity among students. A 2021 statistic from the Hunger and Health Coalition shows that 13.8% of individuals in Watauga County are food insecure. In 2017, it was found that 46.2% of students at Appalachian State University experienced some degree of food insecurity during their time at the college. While housing prices and historic rural poverty contribute to the food insecurity of these two groups of people, larger systemic issues and how the global food system is structured also have a large influence on these statistics.

This study was inspired by the increasing issue of unsustainable and insufficient food systems that do not serve communities or contribute to the longevity of small farms. The state-based efforts to create food security do not do enough to address the systemic issue of hunger, but instead create a dependency on large agriculture industries—by relying on the production of surplus from this industry—rather than cultivating resilience within communities and the land. Food sovereignty is not just about finding ways to fill our own plates, but also how we will feed others and how we will feed our community. After living in Boone, North Carolina for almost four years and working on a small sustainable farm for the summer, I began to make

connections with the wonderful people within our food system and realized that food insecurity was a relevant issue within Watauga County. This study is needed to draw people away from this consumer-based transactional relationship with food, and towards a food system that focuses on connecting people and fulfilling their needs.

First, this study discusses human rights to food and how these rights have been undermined by multinational corporations. Then, I address the concept of food security, and its shortfalls, food sovereignty and the evolution of its meaning, and food asset mapping and a critique of its language. In the remaining sections, I lay out how these concepts play out in Watauga County. Additionally, this study examines what factors contribute to community organizing processes and decision-making, the internet's impacts on community organizing, and what projects, programs, services, or relations contribute to effective forms of food assistance (Kahn 2010). While drawing inspiration from indigenous perspectives and recognizing Black leaders who have built the foundations of contemporary social movements, this study draws connections between post-incarceration food assistance programs, Civil Rights struggles, and contemporary food assistance programs. By interviewing community members on the Watauga County food system, perspectives on the root causes of food insecurity in this region are gathered, and a plethora of innovative programs towards more holistic food assistance are discovered and analyzed.

Community efforts are likely the strongest movements towards more sustainable food systems and food sovereignty, so it is essential to gain an in-depth understanding of their engagement with these issues. Food sovereignty is defined as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems" in the 2007 Declaration of Nyéléni. While there is a myriad of literature on both food sovereignty and the social implications of community mapping projects, there are not many authors who discuss specific community organizing strategies, such as participatory food asset mapping, and how they might contribute to a movement for food sovereignty. In this study, I attempt to connect the two while assessing what resources exist in Watauga that could be potentially relevant for future mapping strategies. By identifying strengths and gaps in Watauga's food system through interviews with community members and experts, I address the issue of food insecurity at a local level and analyze systemic contributors.

The central aim of this research is to gather an idea of what free food assets already exist in Watauga County, what barriers people may face to accessing these resources, make sense of food-based community projects, and how these projects are utilized. This study set out to answer the following questions:

- How do we include communities in decision-making about food distribution and broader food system challenges in Watauga County?
  - How do Watauga locals make connections with those people and resources within the food system, and what are some of the successes and failures within that system?
  - What political and economic concepts have shaped the relations that are uncovered in the interviews with Wataugans today?
- Is participatory community asset mapping useful for community organizing?
- Although food sovereignty is more of an aspiration rather than a readily achievable goal—due to the fundamental reorganizing of the food system that would need to take

place—how do we build up local community organizing capacity for a movement that augments food sovereign practices?

These research questions were answered through conducting interviews with select "experts" within the Watauga County food system and through examining academic literature on the topic. The experts interviewed were mainly members of food assistance organizations, non-profits, churches, farmers, etc. These subjects had a wide range of backgrounds from having studied food systems in university to learning about food systems by doing. To gain qualitative insights into community perspectives on food resources in Watauga, I also took part in participant observation through my work at Springhouse Farm during the growing season of 2021 where I made connections with farmers and other community members invested in local foodways of Watauga. During the time period that this study was conducted, I also attended Watauga Food Council meetings and volunteered with the organizations that are interviewed in this study. Through this type of participant observation and active listening, I was able to discover how decisions were made within these organizations, where they are working to improve, and what new projects are to come (Musante 2010).

During the interview portion of this study, to find answers to my research questions, I asked subjects a selection of the following questions along with several follow up questions:

- What are some exciting/new projects you/your organization is working on this season?
- What do you feel your/your organization's responsibility is within our local food system?
  - Do you feel like you/your organization is able to fulfill this role efficiently with the resources available to you?
- How do you think our current industrialized food system has contributed to the needs of local people?

- Do personal connections and community involvement in your organization's practices/programs influence your organization's ability to serve the community?
  - If so, how do you encourage those who use your services to become a part of building the organization's programs in a participatory way?
- What does a sovereign and self-sustaining food system in the high country look like to you?

These interviews were semi-structured and conducted in a conversational manner so that the conversation could flow naturally. I connected with the interviewees through the snowball method. Using my existing connections that were made during my time observing how the food system works in Watauga over the past two to three years, I was able to contact people I had worked with, volunteered with, or even shared a meal with to recruit participants for this study. Once an interview was conducted I asked the interviewee for suggestions on who I should talk to next, from there I would continue the process and form a snowball of subjects.

The following chapter consists of an overview of the theory utilized in the study. I discuss the difference between food security and food sovereignty, the theory of mapping, and how maps shape worldviews (Crampton 2018). I then draw connections from examples of food-based programs for the formerly incarcerated and how these programs can be applied for strategies of community organizing and holistic food assistance. Post-incarceration food assistance programs aid in the assessment of regular food assistance programs because the success of post-incarceration food assistance programs can be measured by rates of recidivism. Whereas, with typical food assistance programs, the number of people served can be measured, but what the effects are after the fact are largely unknown (Marek 2018). The third chapter presents the statistics on food insecurity and existing free food resources in Watauga County and its central

town of Boone. After setting the scene, the chapter lays out a general description of study methods and design. It goes over the data collection methods, how participants were recruited for the study, my role as an academic researcher, the limitations of the study, and how all of the data was processed. Chapter four presents the findings from interviews and gives an account of non-profit food assistance programs that are already offered or are coming into existence. In chapter five I draw connections between the literature and the interviews, and how the food-based programs discussed in the literature can offer novel ideas for community organizing in Watauga. In the last chapter, I discuss the implications of the study and give suggestions for the next steps of food-based community organizing and participatory food asset mapping in Watauga.

# 2. Theory

#### **Food Security and Food Sovereignty**

In article 25(1) of the United Nations Declaration of Human Rights, it is stated that "everyone has the right to a standard of living adequate for the health and well-being of himself and his family, including food, clothing, housing." Yet, in 2020 nearly one in three people globally did not have access to adequate food and three billion people cannot afford healthy diets worldwide (UNFAO 2021). Access to food is not treated as a right within a capitalist system. With rising numbers of food-insecure people, the flaws in industrial agriculture and the capitalist mode of production have become more apparent. Based on existing literature, it is clear that the food insecurity issue is not a result of shortages of food, and the way to solve hunger is not hidden in high-tech agricultural approaches to increase production (Wittman 2010). In fact, neoliberal economic policies promoted by the United States, European Union, U.S. Agency for International Development, World Trade Organization, International Monetary Fund and World Bank are actually undermining peoples' ability to access food through unfair trade relations. When prices for basic goods go up astronomically on the global market yet wages have stayed the same, there is a greater risk for food insecurity.

On the other hand, when food prices fall drastically, small farmers are at risk of losing their livelihoods because they cannot compete with cheaply priced global food imports (The Price of Aid 2004). USAID is a leading culprit that preys on underdeveloped nations. Food aid is not intended to get at the root of the problem of food insecurity. Food aid appears to provide a gift to underdeveloped countries, but upon closer inspection, this "gift" is one that entangles countries through dependency and disruptions to the local food system. The price of aid is the loss of the food sovereignty of receiving countries, continued poverty, and persisting

underdevelopment. Food aid also holds a significant role in American foreign policy and has long been motivated by capitalist interests abroad as a means of geopolitical influence, surplus disposal, and humanitarian assistance (Clapp 2009). This is why food sovereignty and the ability to be resilient despite changes of the global market are essential preconditions for food security.

Due to the fact that food is not treated as a right under the current capitalist system, one is only entitled to food by trading something one owns, arranging production using one's owned resources, or resources hired from willing parties, by the trade-based and production-based entitlements related to one's labor power, or by what is willingly given to one by another who legitimately owns it (Sen, 2). No one is entitled to the land or the food that grows on it unless they have participated in one of these modes of exchange of the "fictitious commodities" of land, labor and money. Someone might starve not because there is not enough food available but because one might not have an exchange entitlement that includes food. According to Sen, the inadequate distribution of food causing starvation most often occurs because of one's relationship to achieving the commodity of food, not the availability of the food itself. In distress situations, exchange entitlements might be inadequate to achieve food, which is why community control of land and resources is a crucial aspect in the fight for food sovereignty.

Food security is not enough to build the foundations for a resilient and sustainable food system, as it does not address or take full account of those who produce the food, where the food is produced, and how. The concept of food security does not criticize the unsustainable patterns of food consumption and distribution under the current capitalist system. The United Nations defined food security in the 2001 State of Food Insecurity report as "a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life"

(FAO 2003). To be food secure means that food is available, there are adequate production and stock levels of food, food is accessible with one's level of income, food is nutritious and can be properly utilized by the body for energy, and access to food is stable regularly rather than periodically (Practical 2008). Being food secure means that one can achieve all of these five pillars.

Food sovereignty, on the other hand, offers alternatives to the current system of food production and distribution. La Via Campesina defined food sovereignty as "the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity" (La Via Campesina 1996). La Via Campesina is an international group of farmworkers, peasants, and Indigenous peoples who support food sovereignty. Later, at the 2007 Forum for Food Sovereignty in Sélingué, Mali, the Declaration of Nyéléni defined food sovereignty as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems." This updated definition connects more to the indigenous rights movement and emphasizes that to achieve food sovereignty "peoples" must be able to cut ties of dependency on nations and work towards self and community sufficiency and local productive capacities. The goal of food sovereignty can be aided with the help of mutual aid, collective forms of production and distribution, and building networks of alternative foodways (Trauger 2017). Organizing for social good and challenging market-driven modes of acquiring sustenance-that are largely inaccessible for many people-is possible for an alternative food future. There are already many pockets of communities around the world trying to build resilience and sovereignty through organizing in their community. Although food sovereignty is

an aspiration, rather than something that is readily achievable within the existing capitalistic and hegemonic structure, community organizing for greater food self-sufficiency is achievable.

## Participatory Food Asset Mapping

Community organizing can manifest itself in various ways through pot-lucks, protests, community forums, and even map-making. While all of these forms of organization are needed on the local and global levels to build a movement for food sovereignty. I chose to zoom in on the method of participatory food asset mapping for a portion of this study. Food asset mapping has been a tool used by city planners, land use evaluators, social planners, etc. to integrate food systems into city planning. Individuals outside of the realm of city planning have utilized a more participatory approach to food asset mapping to co-develop a visual representation of community resources, situating the process of mapping within the communities themselves (De Master 2019). For example, the Providence Foodshed Justice Project was created in response to the USDA "Food Desert Locator" map that portrayed Providence, Rhode Island neighborhoods as food deserts or areas without access to food in large grocery stores. Providence residents noticed that some areas on the map that were marked as food deserts actually had plentiful sources of food from small grocers or bodegas, community gardens, food assistance programs, mini-marts, and much more. This deficit-oriented style of mapping diminishes the non-conventional resources available to the community and frames this area based on their deficits rather than abundance. The Providence Foodshed Justice Project was created in response to outsider depictions that minimized the resources and resilience of this community (De Master 2019). This kind of mapping is meant to unite, mobilize, and connect community members while focusing on the abundance within a geographical area rather than solely displaying a community's deficits as

might food desert mapping<sup>1</sup>. In the collaborative production process of community asset maps, outside interveners are not supposed to take the center stage.

However, participatory food asset mapping does not come without critique. There is not a large amount of peer-reviewed literature on the topic of food asset mapping, but in a study by Tammara Soma (2022) and others, it was found that some participants in a participatory food asset mapping project expressed that the words "resources" and "assets" are colonial terms for ways of thinking about food. For food to be seen as a human right rather than a commodity, we need to stop talking about food as a commodity. When we look at food as a resource, it is vulnerable to exploitation as so many colonial entities have exploited precious "resources" in the past and continue to do so currently. Our worldviews are shaped by language. The way we speak about food as being "produced" as a "resource" the more narrow our view becomes of nature. Rather than honoring the ecosystems for the life it brings, we view that life through its value on a commercial market (Morrison 2016). Some Indigenous peoples frame food as "kinships" rather than as 'assets'" (Soma 2022). Even fossil fuels can be seen as kin from an Indigenous perspective because the bones of the dinosaurs "remind us of the life that once teemed here when the place...was home to myriad species who made life, made worlds, within lands and waters" (Todd 2017). This sort of language emphasizes the relational and social quality of "resources", rather than looking at food as a commodity. The capitalist market that commodifies food and treats it as an asset is an economy disembedded from ecological and social relationships which promotes exploitation and environmental harm (Holmes 2013). On the other hand, a commons-based mindset where food is decommodified requires dissuading the drive for

<sup>&</sup>lt;sup>1</sup> "In the Food Desert Locator developed by USDA's Economic Research Service, a food desert census tract is defined as a low-income tract where a substantial number or substantial share of residents does not have easy access to a supermarket or large grocery store."

https://www.usda.gov/media/blog/2011/05/03/interactive-web-tool-maps-food-deserts-provides-key-data

accumulation and unfettered growth that is so commonly sought after by large corporations and governments allied alongside them (Kuljay 2021). Food asset mapping can be problematic in many ways, in its language, lack of inclusion, and the framing of what is considered an "asset," and who gets to define them. Additionally, the content of food asset maps depends largely on who contributes to the process of map-making.

While participatory map-making has traditionally been practiced by Indigenous and local people who have created maps of resource uses, oral maps, mental maps, and visual maps of territories, Indigenous perspectives are "notably absent from the current definition of 'food assets'" (Soma 2022). To the Diné/Navajo indigenous peoples—who face difficulties accessing healthy foods on reservations—food sovereignty is a way to prevent diseases, solidify cultural identity, and provide greater self-sufficiency. Through reclaiming the ability to produce food on indigenous land they are able to continue ancestral traditions, remain close to sacred grounds, and reestablish cultural practices (Ricart 2019). The lack of inclusion of Indigenous perspectives reflects the power dynamics that could play out between participants and outside interveners and the "colonization or suppression of indigenous traditional knowledge" (Soma 2022). It is important to consider the impact of colonization on the traditional foodways of indigenous people that exist in the territory being mapped and how indigenous people have been excluded from the use of these "resources" on unceded land.

Furthermore, food assets can be defined differently depending on who is defining them. It could be places where people grow, buy, prepare, share, or even learn about food. Natural and informal assets on the other hand are often overlooked. A formal food asset may be that of a grocery store, food pantry, restaurant, etc. Whereas informal food assets may be things like gardens, mutual aid, edible landscapes, family and friends who have food, etc. that are less

obvious to the public eye. There are many more perspectives about food assets and what they are. These perspectives should be reflected and represented inclusively, rather than centering those of experts and excluding people with less technical or academic perspectives. As definitions of food assets vary, so do motivations for mapping them (Soma 2022). When something is deemed an "asset" this means it has value and with "value" comes more funding or investment. Who is determining what has value in our food system is tied to a form of power, and "there is danger in privileging one set of values" (Soma 2022). Everything that is valuable to humans may not be valuable to nature and vice versa. What is valuable to Indigenous communities and people of color may not be of value to White people. What is of value to women and non-binary folk may not be of value to men and, therefore, may not receive funding or protection from exploitation.

For any form of community organizing, inclusivity should be at the forefront. Hence the term "participatory" in "participatory asset mapping." Everyone should be included in the process of telling "stories from different cultures and traditions," which could improve the quality of the map by including diverse perspectives (Kahn 2010). In some traditional quantitative-based maps using GIS, for example, the worldviews of those who created the map are centered while other worldviews (such as indigenous, non-expert, queer, rural) are left out. Top-down mapping projects facilitated and created by experts are often inaccessible to the general public due to the advanced level of technical knowledge needed to operate some of the mapping programs. GIS leaves out those without technical knowledge, without access to technology, or access to the internet. These issues are especially prominent in marginalized communities which contributes to the unequal representation of knowledge and power. GIS also privileges quantifiable data and leaves out other mappable knowledges and qualitative insights.

Participatory GIS on the other hand is a response in critical cartography to the shortcomings of GIS and makes room for improvements in the field. PGIS brings the mapping process into the hands of the users/community members so that their geographical realities are embodied in the map while simultaneously making room for collaboration and creativity (Nicolosi 2020). Community maps that emphasize collaborative production of knowledge and resources by locals are a form of counter-mapping to help facilitate and imagine alternatives to conventional mappings that reinforce hegemonic structures (Rudstrom 2009).

Nancy Peluso first coined the term "counter-mapping" in 1995 when it was used to represent "Indigenous forest communities in Kalimantan, Indonesia to counter state-based (and World Bank financed) claims to local forests" (De Master 2019). Counter-mapping serves to reclaim the mapping process and work against dominant state-led mapping projects by creating alternative visions of space that question the limits and authority of the state (Harris & Hazen 2006). Because maps often express hidden interests, mapping used for a colonial or capitalist agenda might have negative implications on the community or area that is mapped (Denis Wood 1992). For example, the Mercator distortions that reflect Europe as central to a globe map reflect a certain cultural sentiment of the European who created it. To radically counter the Mercator, upside-down world maps are created to change our ideas about the Global North, Global South, and geographical relations of power. Google Maps is a widely used mobile application that does not map any sharing opportunities or sustainability projects and only displays points for exchange in the capitalist economic system (Nicolosi 2020). A co-production of a community asset map including resources for free food and non-commodified exchanges is a statement that pushes against the dominant capitalist economic system and its succession.

Unfortunately, food asset maps, like most quantitative maps, are static in nature and lack the ability to keep up with the ever-changing landscape of the food system. Constantly tracking political landscapes and social relations of the food system and changes in organizations or businesses can be difficult to account for in a one-time mapping project. Online food asset mapping could mitigate the static nature of mapping if it is used as an interactive, open-source, user-friendly, online tool. Although community asset mapping does not necessarily serve as a way of reclaiming a physical territory, online mapping projects could have the potential to reclaim a digital territory for resource sharing and knowledge production.

Google My Map, Epicollect, UMap, and OpenStreetMap are a few examples of online tools that could be implemented, but there are a variety of available mapping apps out there. Internet-based mapping services such as DGPM (Digitally Mediated Participatory Mapping) are a form of counter-mapping. DGPM is a geospatial web technology that relies on volunteered geographic information (VGI). This form of mapping differs from traditional GIS in that it facilitates the participation and knowledge sharing of community members for the advancement of social good. Participation creates networks that foment resilience, community longevity, and sustainability which are crucial to food sovereignty (Nicolosi 2020). Internet-based mapping services can be accessed from anywhere such as a public library, and users do not need to have an internet connection at their home to participate. Qualitative data can be coded to form multiple types of multi-sensory maps that go beyond oversimplified traditional GIS representations of the foodscape. Quantitative data is not the only kind of data that can be represented. Drawings, sounds, interviews, art, videos, etc. can all be incorporated in PGIS to stimulate the senses and bring the map to life. Creating art out of maps not only "involves an inherently selective process in the display of information" but also bridges the gap between

community representation and conventional maps, making the process more inclusive (De Master 2019, 248). User-friendly online applications not only make mapping technologies more accessible but can also create dynamic maps that can be constantly updated and added to.

While DGPM can make mapping projects more accessible for some people, the digital divide raises concerns for inclusivity on the other hand. Mapping projects that require internet access can make these projects more exclusive and inaccessible for people who live in rural areas without broadband. Since Watauga County is a largely rural area, this raises concerns. People who live in rural areas are often also the people who struggle the most with food insecurity. Therefore, with digital mapping, there is a risk of excluding rural voices and inputs of those who know the most about food insecurity but are not able to participate because they are not located in a town center or connected digitally with the community.

However, online community organizing efforts have radically altered the way people generate knowledge and interact with one another. The internet, as a common space for collective knowledge generation and discussion, has democratizing power. Yet, technology should not be lauded as a one-size-fits-all solution to the world's social issues, as there is plenty of room for criticism about the accessibility and sustainability of certain technologies. However, through more open and accessible collaboration, communities have the power to build their organizing capacity with digital facilitation. In-person activities can be organized online while building "trust and rapport among communities and allies" (Brady 2015). Mobile phone applications are often used to establish goals and connections within a group before taking action for the desired change. The internet is a tool for identifying allies, building community, building collective power among communities, forming relationships among decision-makers, mobilizing people and plans, and creating dialogue. Facilitation for organizing exists online in some

instances for community mapping initiatives to locate areas of resilience in their local alternative food economy. This academic study intends to learn from what other communities have achieved through mapping food systems and in the future to learn from those in the Watauga community. This research does not intend to impose mapping technologies on my community but rather is intended to explore where mapping fits into the puzzle of Watauga County, if at all.

#### **Food Justice and Civil Rights**

While this study is intended to assess participatory food asset mapping, it is also crucial to assess the types of programs that may be offered on such maps and if their services are useful in aiding the capacity building of the people who use those services. Through the historical community organizing strategies used by Black leaders, we see how "food has served a double purpose" (Marek 2018). The strategies and programs for organizing around food utilized by various community groups are fairly new in the grand scheme of things. Many community groups and contemporary food-based organizations that have come about today have roots in the Civil Rights struggle. The tactics that are used today to create social change and combat food insecurity are inspired by the work of Civil Rights leaders from the 1950s and '60s. The Black Panther Party Breakfast Program, the Victory Gardens Project, the Victory Bus Project and more were all programs created by Civil Rights activists centered around not only providing sustenance but using food as an organizing tool.

The Free Breakfast for Children Program led by the Black Panther Party served to build consciousness of the intersections between hunger, marginalization, and capitalism. This program served the role of educating the youth for "future food-based resistance efforts" while meeting the immediate needs of the hungry. This is a good example of a community organizing strategy that goes beyond creating temporary solutions. Not only are they feeding the hungry but

they are also taking a structural approach towards building a constituency of advocates for systemic change. The Free Breakfast for Children Program also recognizes that people are unlikely to get involved in fighting for or other aspirations—such as civil rights—until their basic needs are met.

The Victory Gardens Project, which connected rural and urban areas of the northeastern United States, had a mission to encourage hands-on participation to combat inequality, restore lands, and establish community independence. This project worked to bring organic produce to local communities by creating a "collective practice among organizers and volunteers" to "share resources, skills, and labor" (Marek 2018). This project is unique in that it creates a network of individuals with resources that both give and receive. As opposed to a sole entity distributing the resources, which can make receivers feel powerless if they are not included in a relational exchange, this project levels the playing field and assures that everyone partaking has some sort of agency and wealth to share, no matter how small it may seem. This eliminates feelings of isolation and powerlessness that can come from some food assistance programs (Parson 2018).

#### **Holistic Food Assistance**

African Americans have been leaders and innovators of food-based community organizing for years, likely out of necessity in a racist society that builds barriers of access to food for minority groups. Racial projects, or "political and economic undertakings through which racial hierarchies are established and racialized subjectivities are created," have subjected communities of color to policies and laws that deny their access to food and means of producing it (Alkon 2011). In 2019, the mean prevalence of food insecurity in the United States was 10.5%. This rate increases to 22.5% among Black populations and 18.5% among Hispanic populations (USDA Economic Research Service). Black and Latino men also bear the biggest burden of

unjust hyper incarceration in the United States due to the prison-industrial complex<sup>2</sup> and school-to-prison pipeline<sup>3</sup> (Marek 2018). Incarceration leads to obstacles to finding employment after release and subsequent food insecurity. Due to these racial projects that have produced hunger, food justice advocates for local food systems that meet the food needs of communities of color and low income communities (Alkon 2011).

Examining post-incarceration food assistance and employment programs, and the services they provide, gives insight as to what holistic food assistance programs might look like and how their projects may be applicable to food insecurity in Watauga. Those that offer a wide range of assistance and community building lead to lower recidivism rates and higher rates of self-sufficiency. Whereas, those that solely focus on providing employment, job training, and food have high recidivism rates due to the lack of community support. The success of these post-incarceration food assistance and employment programs is measured by recidivism rates. These programs specifically have a unique opportunity to measure how effective their assistance is and if people are really becoming self-sufficient through participating in these projects and interacting with the program. Post-incarceration food assistance programs can measure rates of recidivism in ways that other food assistance programs cannot measure the rate at which the people they interact with receded back to unfavorable life circumstances which keep them food insecure. Based on such programs, we can gather ideas of what types of support needs to be replicated in community organizing efforts for food sovereignty. These programs show the "role

<sup>&</sup>lt;sup>2</sup> "The prison-industrial-complex is an interweaving of private business and government interests. Its two-fold purpose is profit and social control. Its public rationale is the fight against crime." - Eve Goldberg

<sup>&</sup>lt;sup>3</sup> "Students in high-poverty, high-minority schools are routinely provided fewer resources, fewer qualified teachers, and fewer advanced-level courses than their more affluent white peers.<sup>1</sup> Not surprisingly, they experience lower rates of high school graduation, lower levels of academic achievement, and higher rates of college attrition." -Wald and Losen

of food as an agent of change" towards building a community support system, connecting with the land, and cultivating resilience (Marek 2018).

Planting Justice is one example of a post-incarceration food assistance program that creates self-sufficiency rather than dependency by offering a holistic form of assistance which foments the recovery of its participants. Planting Justice focuses on growing food and involving those released from prison in gardening projects. Incarcerated people at San Quentin State Prison in California have the opportunity to enroll in the Insight Garden Program while they are in prison. After they graduate from the program and are released, Planting Justice is waiting to give them a job the next day where they make \$17.50 an hour to work on various gardening projects. Planting Justice not only offers a job but also offers fresh vegetables, a safer and healthier neighborhood while at the same time drawing attention to systemic inequalities created by the prison system and industrialized food system. Food workers are often treated poorly and have limited access to affordable and healthy food, especially in low-income areas. Planting Justice works to mitigate this harm by providing education, skills, jobs, and community support to promote sustainability to marginalized populations. Not only are they focused on "holistic reentry" to help those who have already been in contact with the criminal justice system but they also focus on ending the inequities and poverty that lead to incarceration in the first place. With the job training they provide upon release, they also offer peer support, a living wage, full healthcare coverage, and more opportunities to grow. Through offering these forms of assistance it was found that Planting Justice had a recidivism rate of 0%.

The work of Planting Justice speaks to "the role of food as an agent of change." The food they grow is a way of building a community support system, connecting with the land, and cultivating resilience. Planting Justice provides avenues for marginalized communities to not

only get a job and access to food but also assert their own agency, enhance community and political engagement, and promote sustainability, all while growing a larger movement towards food sovereignty. With holistic food assistance, Planting Justice being one example, food "provides a particular vehicle through which individuals can learn to empower their bodies, minds, and communities" (Marek 2018). In this study, I look further into how food assistance programs in Watauga county are using food as an agent of change, and apply what can be learned from other food assistance programs and community projects and how they compare to projects in Watauga.

By examining the attributes among successful holistic programs for post-incarceration food assistance, it can be gathered what might be helpful for food assistance in Watauga. Planting Justice facilitates community involvement in the program by giving individuals a stake in their personal success and the wellbeing of their community through involvement in gardening projects and the sale of food grown from these gardens on a sliding scale to residents in surrounding neighborhoods where grocery stores are not available. Community organizing around food sovereignty allows people to contribute to the well-being of society while also receiving help. Those who are food insecure may feel as if they have more agency over their own lives and in society at large when they are involved in a community group rather than solely receiving one-sided assistance. Those involved in Planting Justice are not only receiving food from the garden they are helping to cultivate, but they are also selling this food to people in need in their community.

People can feel isolated when they are released from prison, or when in poverty. They may feel as if society has turned its back on them due to all of the barriers that exist for the formerly incarcerated, the poor, and other minorities. Growing connections among individuals

and communities are the foundation for opening up space for food sovereignty. While solely receiving food assistance from an entity with which one has no connections with can feel isolating, attending community events where food distribution is an additional aspect of the gathering makes the process of receiving assistance less lonely. A sense of hope and strength is what marginalized communities need in addition to food assistance.

The most successful post-incarceration food assistance programs, such as Planting Justice, focused on building community through food and food-based work while also focusing on ending the inequities and poverty that lead to incarceration in the first place. Short-term immediate assistance is important, but understanding and recognizing the root causes of food insecurity while creating strategic plans to combat those root causes also need to be employed in food assistance strategies. Centering more inclusive strategies for mobilization by validating the stories and knowledge of those who are directly affected by food insecurity might develop a more "sustained sense of activism" and foment long-term solutions (Marek 2018).

Some of the strategies used in the more successful organizations were peer educating, resource sharing, labor and skill sharing through gardening, providing access to healthcare, and creating accessible jobs. Other theoretical strategies used were building consciousness of systemic inequalities, meeting immediate needs while simultaneously planning for how to end the root causes which create those needs, creating networks and support systems, and facilitating community involvement and hands-on participation to restore the land and community while connecting with them. These strategies should be taken into consideration when evaluating the organizing strategies of food assistance entities in Watauga county.

# 3. Methods

#### **Boone/Watauga Data and Resources**

Boone, part of Watauga County, is a small town located in the Appalachian mountains of North Carolina. In 2019, the population of Watauga County consisted of 56,177 people<sup>4</sup>. With an average growth rate of .25% per year, the population is estimated at 56,463 people in 2021 (World Population Review 2021). Students from Appalachian State University and tourists account for a large influx of people seasonally or during the school year. As of 2019, the poverty rate in Boone was 21.4% making it one of the three counties in North Carolina with the highest poverty percentages (U.S. Census Bureau 2019). Along with the striking poverty rate, about 13.8% of individuals in Watauga County are food insecure (Hunger and Health Coalition 2021). In a study by Dr. Lanae Ball and Dr. Laura McArthur published in 2017, it was found that 21.5% of freshmen alone were food insecure at some point during their first year of college at Appalachian State University. Of food insecure people in Watauga County, 25% of those do not qualify for SNAP (Supplemental Nutrition Assistance Program) and other nutrition programs (FRED Economic Data 2020). Although there are people in need who may not be able to afford the \$3.79 average meal cost in Watauga or conventional grocery stores, they may not qualify for government assistance (Second Harvest Food Bank 2019). Food insecurity is a prominent issue worth addressing around the world and especially in rural areas like Watauga County that are vulnerable.

There are several non-profit organizations and initiatives in Watauga that aim to mitigate food insecurity such as Second Harvest Food Bank, Hunger and Health Coalition, F.A.R.M. (Feed All Regardless of Means) Cafe, Hospitality House, Watauga County Health Department,

<sup>&</sup>lt;sup>4</sup> Data from U.S. Census Bureau https://www.census.gov/quickfacts/wataugacountynorthcarolina

Double Up Food Bucks, Mountaineer Food Hub, Western Watauga Food Outreach, Blowing Rock Cares, Little Free Pantry of Boone, and college campus food pantries. These organizations provide tremendous resources to residents in the area, such as free meals, free phone support for people seeking to enroll in SNAP, help signing up for WIC (Women, Infants, and Children), healthy food incentive programs to double the value of federal nutrition benefits that can be spent at farmer's markets, and much more (Watauga Food Council 2021). Having access to such institutions and community organizations that are willing to help is crucial to a community's resilience and survival in a world where food is commodified beyond reach for those in poverty and not seen as a human right. These resources provide communities with opportunities to achieve greater food security. Yet, to achieve food security communities first need to achieve food sovereignty (La Via Campesina 1996; Trauger 2017). Food sovereignty means going beyond relying on government supplemental nutrition programs and NGO run food pantries that simply mitigate the issue of hunger. Food sovereignty addresses the root issue of hunger, which means cutting ties of dependency and building up community assets and resilience.

#### **Case Selection**

Watauga County has a rich history of self-sufficiency out of necessity. Though the Cherokee Indigneous people historically have resided on the unceded lands of Watauga, migrants to Watauga were German, Swiss, British, Scots-Irish, and French and settled in the mid to late 1700's. However, the majority of them were second or third-generation Americans. Many migrants made livelihoods through herding, hunting, and farming. The first-generation Americans who were able to get a hold of land when it was still available and cheap, took the fertile and flat bottomlands and exploited it and the people on it for their livelihoods. Those European settlers who came in the 1800's and with fewer resources settled further up in the

mountains. Those who were landless were tenant farmers or chose to look elsewhere for more opportunities.

So, many people that settled in the mountains had subsistence as their first priority. Any excess was marketed for exchange. Yet, the region was not a good place for industrial farming with the lack of clear south-facing hillsides and steep slopes. People in the region depend heavily on the deciduous forest that provided supplies for houses, wild game, fuel, wild foods, medicinal plants, and fodder for livestock. The woody mountain tops were a commons accessible to all, and mutual assistance bound the community together (XIV, Voices from the headwaters). So, out of necessity, people grew their own food and raised livestock, passed down skills like canning and food storage. Watauga has historically been a "poor" mountain community, in the materialistic sense of the word. However, living among one of the most diverse forested areas in the world, Wataugans were not short of resources. "Mutual aid" before the term became commonly used, was a common practice. Due to my personal academic interest in mutual aid, anarchist theory, and the commons, the fact that people in Watauga have practiced mutual aid and coxmmons governance without the state makes it a great site to examine for research purposes.

#### **Purpose of The Study**

The goal of this thesis is to explore participatory community-centered methods for achieving food sovereignty. Some techniques and tools used to engage communities in discovering solutions to issues such as food insecurity have been community asset mapping, semi-structured interviews, surveying and sampling, focus group discussions, and more. The purpose of this study is to gain public insight on the issue of food insecurity and to explore the impact and usefulness of interactive community asset mapping for the facilitation of just food distribution in the high country. Understanding what resources are already available to

communities is one step along the path to food sovereignty, while having conversations with those in the community is a good way to know what can aid the process. What I hope to discover through this research is how to include rural communities in decision-making about food distribution and broader food system challenges in the High Country. What are some of the barriers keeping low-income rural communities reliant on food assistance from government or NGO organizations? How do we build up local capacity so that these communities can become more food self-sufficient? Lastly, through surveys and interviews, I hope to gain local insight on the usefulness of, or the desire for, participatory community asset mapping and how previously created food systems maps are being used.

#### **Data Collection**

A qualitative research approach utilizing surveys and interviews was used to answer the above questions for this study. Interviews with farmers, gardeners, community members, and members of non-profits varied in length respecting the interviewees' time and were semi-structured and open-ended. Since I gathered data from human subjects, I obtained IRB approval before doing so (IRB Study # 22-0066). During the length of the surveys and interviews, I continued to build upon the literature review. During each interview, notes and audio recordings were taken. Recordings were taken with the permission of the participant and were set aside for my own use of reviewing them. The participants signed consent forms before each interview and were informed that the recordings would not be released. After each interview, a summary was written about the main points of interest during each conversation and the recording was reviewed again to gather details that may have been overlooked during the interview. After collecting the data, I coded and analyzed the results based on keywords and common themes.

The approach to data collection and analyses was flexible and the line of inquiry changed each time as I gained a better understanding of the relevant data obtained. For example, it was found that when directly asking participants labeled as "connecters" "how technology has changed the way they connect with community members/people in need of food assistance?" clearer answers were obtained when asked instead if "convenience or ease of accessibility to the organization and its services is a driving factor in the success or failure of your organization's goals?" After being asked the second question, more subjects expressed how online delivery services have expanded the reach of their organization, yet the online nature of these programs has presented an issue with reaching those in areas with unstable internet. After interview questions were refined, I was able to achieve clearer answers. I also received more relevant recommendations from interviewees about who should be interviewed next using the snowball technique where research participants would recruit more participants for the study. Recruitment began with sending emails that contained survey links to groups of farmers, non-profit organizations, members of the Watauga Food Council, students, or professors at Appalachian State University and in Watauga county. The existing connections I had cultivated during my time at the university and working in the community were helpful for recruitment. Using the existing connections that I had, at the end of each interview, I asked the subject if they knew of anyone who would be interested in speaking with me. The snowball method worked well in this case because of the small size and tight-knit nature of the Watauga community.

## **Participants**

Eight subjects were interviewed for this study. The subjects in this study are identified by their name, their stake or position in the food system, their ideas of how the food system could be improved, and asking them to evaluate its strengths and weaknesses. The target population of

this study first included farmers, food bank workers, Blue Ridge Women in Agriculture members, F.A.R.M. cafe workers, community gardeners, Food Council members, invested community members, and any other essential people in food system work. Yet, as my study progressed, I found it more relevant to interview rural people needing food assistance as they seemed to have the most insight on the issue of hunger in Watauga from first-hand experience. The goal of the surveys and interviews was to grasp how a variety of people describe the advantages and disadvantages of the local food system, how much people know about existing resources, whether people think having technology as a hub and organizing center for these resources might influence their ability to access them, and how managers of existing food sovereign spaces would feel about using technology to organize and share space or information. Through each interview, not only did I become more connected with those who were invested in the topic that I was researching, but my research question became more refined, and the target population evolved.

#### My Role As An Academic

Considering the role I play as a researcher, it is important to situate myself and my position as an academic within the social hierarchies that exist in Watauga county and around the world. As a student in higher education who is not local to the area, I am an outsider doing research on localized and sensitive topics. As an outsider, I recognize that I inherently hold biases. The information that I possess on this topic is limited and not as complete as the information that local residents hold. Therefore, I chose data gathering methods that reflect this. Interviews, conversations, and surveys are some methods used to learn from not solely academic experts, but also local knowledge holders. To encourage a more democratized process of

knowledge production at the academy level, the research processes need to be more equitable and mirror this sentiment.

In an attempt to learn from local knowledge holders, participant observation was exercised through my relationships cultivated working at Springhouse Farm and participating in projects with the Watauga Food Council. I interned at Springhouse Farm, a small sustainable farm in Vilas, owned and operated by Amy Feidler, during the summer of 2021 when I began forming the research questions for this study. By participating in the daily events of a Watauga County farmer and recording observations of the common activities performed and conversations had, I was able to gain a better understanding of the most "fundamental processes of social life" among farmers (Musante 2010). My work over the summer provided me with context with which to construct my survey questions, interview guides, and processes of gathering data. Furthermore, as I began taking part in the Watauga Food Council meetings, I was invited to participate in the construction of a "Listening Project for Food Sovereignty" organized by an AmeriCorps Vista member of Blue Ridge Women in Agriculture. As I participated in the meetings, I observed the methods of idea-sharing, brainstorming, networking, and task delegation that were used among community members to create wanted change. While in this space, I listened, observed, and recorded rather than using direct inquiries like in the semi-structured interviews and surveys.

I believe that it is the responsibility of academics to acknowledge and lift up the visibility of existing knowledges outside of the realm of higher education rather than centering the academy as a hub of knowledge production. Inspired by the work of Amy Trauger, Kathryn Teigen De Master, Jeremy W. Crampton, and more, I chose to center the co-production of knowledge and participatory learning both in the research topic of this study and the methods

themselves. The co-production of knowledge is the exercise and practice of participatory investigation and information sharing. Drawing from more than one perspective, listening to, and validating the experiences and life lessons of others that may be outside of the academic realm allows for more equitable research processes and levels the hierarchy of knowledge that tends to privilege Western scientific knowledge. Participatory techniques presume that everyone, local person and professionals alike, possesses considerable knowledge, skills, and expertise that can be utilized and should be respected. Participatory techniques within the food system are not only central to the topic of this research study but are also acted out in the gathering of data and the formulation of findings for this study through the Listening Project for Food Sovereignty. Not only was I able to attend this project, but I was also invited by the facilitators to provide my input in the formulation of questions, recruitment of participants, and to share what I had gathered so far from my research.

#### **Limitations Implied in the Study Methods**

It is difficult to ensure long-term collaboration with community members who have helped with this project because the duration of this research is limited and must be terminated by the time of my graduation from Appalachian State University in May 2022. Since students are typically only in the academic sphere for 4 years and often leave the community they do research in after graduation to find jobs, feelings of extractiveness often come with academic research projects like this one. When academics ask locals for help with a research project but the academic is unable to give something in return, this can feel extractive and cause tensions over time. To avoid this, academics should invest in long-term relationships with the people and projects they are involved in during their research in order to create common goals and

understandings (Mitlin et. al. 2020). Still, it is crucial to keep in mind the unequal distribution of power throughout this process.

In order to mitigate the extractive nature of this research project, I volunteered a few hours of my time every week working at F.A.R.M. Cafe, making food deliveries through the Hunger and Health Coalition, interning at Springhouse Farm, and taking part in Watauga Food Council meetings. As my research continues I will find additional ways to stay involved and give back to the community that has helped and taught me so much during my four years in Watauga. I plan to stay in Boone and develop this research further through dedicating my time to community organizing around just and sustainable food systems, permitting I find a way to sustain myself while doing this.

#### **Data Processing**

To get a better understanding of how the interviews contributed to my research, interview transcripts and notes were gathered and organized. If common themes were brought up within the interviews, a note was taken and the data was coded/labeled with the general idea of this common theme. Directly after each interview, a brief one-page summary was written about the key takeaways from the conversation. Afterward, gaps in the summary were filled in with more details derived from notes and recordings taken during the interview. If concepts came up in conversation repeatedly or were spoken about for a longer period of time, the topic would be given a title such as "barriers," "projects," "language," etc. If topics that related to these titles came up in other interviews, the details of that concept would be added to the corresponding title section. After the data from interviews were collected, the concepts were related to pertinent literature and theory. Literature was used to better understand and connect the interview topics to the concept of the study.

During my time working at Springhouse Farm, I was interning to receive class credit for the hours worked at the farm. Notes were taken every week of the activities completed at the farm, and observations were recorded in an ongoing journal to be turned in at the end of the summer to my internship advisor. The field observation notes written in a physical notebook for at Springhouse Farm were then digitally transcribed and reviewed when writing this study. Field notes were analyzed through relevant word searches that related to the common themes of this study and reflections were made based on key learning objectives from my time at the farm. Data was processed by rereading field notes and drawing connections between interviews and the literature review. The same was completed for field observations taken at Watauga Food Council meetings and during the Listening Project for Food Sovereignty planning.

# 4. Findings

For this study, I interviewed five members from different food assistance nonprofits in Watauga, one farmer, and two community members involved in the food system through religious or community organizations. The non-profit organizations examined included F.A.R.M (Feed All Regardless of Means) Cafe, BRWIA (Blue Ridge Women in Agriculture 2022), the Hospitality House, and the Hunger and Health Coalition. I volunteered with F.A.R.M. Cafe once a week on and off for two to three months depending on my availability, and I made mobile food deliveries for the Hunger and Health Coalition sporadically when help was needed over the course of one month. The Hospitality House is not open to volunteers at the moment due to the COVID-19 pandemic. Due to time constraints, I was not able to volunteer with BRWIA, but I maintained a close relationship with a member of the organization to assist with a listening project they were planning on conducting.

# "Are you a volunteer, are you an employee, are you a client? No, it's just a community."

# - Benjamin Loomis (Hunger and Health Coalition)

The traditional food assistance model draws a sharp line between givers of food assistance and receivers. This is where the limits of the non-profit model for food distribution become apparent. Although immediate food assistance is necessary in times of crisis, "food assistance is essentially a band aid solution. In the long run, giving out food causes more problems than good" says Clara Coffey, the volunteer coordinator/garden coordinator for the Hospitality House. Clara says that while giving food assistance is necessary at certain times, nonprofits need to go beyond solely handing out food and work towards addressing the more systemic causes of hunger. This is what Clara hopes to achieve within her organization. The Hospitality House, incorporated in 1984, came out of a coalition of six local churches. Ever since, the Hospitality House has been aiming to "rebuild lives and strengthen community by providing a safe, nurturing, healthy environment in which individuals and families experiencing homelessness and poverty-related crises are equipped to become self-sufficient and productive" (Hospitality House 2022).

The goal of the Hospitality House, as stated at the end of its mission statement, is to equip its people to become "self-sufficient and productive." This cannot occur through a one-sided exchange of resources. Food assistance that is not relational or capacity-building creates a dependence on the entity providing that assistance; that entity may become a crutch rather than a vehicle for a holistic process of healing. Food assistance is meant to provide short-term support that people can lean on during hard times. But, what causes hard times to persist for so many people in Watauga and around the country? People who struggle with food insecurity, poverty, marginalization, etc. need community support; they need for their voices to be uplifted and their potential recognized. Receivers of food assistance may experience feelings of powerlessness and a lack of potential or agency when they are solely being handed assistance but not being included in conversations and decision-making around what has caused them to need food assistance in the first place.

"Clients are clients at many non-profits," of which Benjamin Loomis from the Hunger and Health Coalition is not a fan. The Hunger and Health Coalition is a non-profit organization, incorporated in 1982, whose mission "is to relieve poverty and hunger in a compassionate manner for families and individuals who are experiencing economic hardship and food shortages." The assistance they provide includes "food, medicine, wood and referrals to other community resources" (Hunger and Health Coalition 2021). Benjamin Loomis is the Grant and

Program Coordinator for the Hunger and Health Coalition (H&H). He writes grants and helps to implement and create innovative programs for the non-profit organization.

One of the innovative programs he and his partners are beginning to implement is a new program to blur the giver/recipient line; neighborhood food councils. It is still in the experimental phase, but the idea is that people who are already actively involved in their communities and are enthusiastic about spreading the word of H&H will be given a stipend to be a community organizer within their neighborhood and be a community insider who gives information to H&H about the needs of that community. The stipended community member will be someone who already receives food assistance from H&H and is willing to go door to door and have conversations with their neighbors about their needs. This may destabilize the power dynamics between giver and receiver that is seen in other food assistance programs. If there is a neighbor in need, the community organizer can connect them with H&H.

Most of the connections that H&H has made are through word of mouth and established relationships. This has worked out to be the best form of communication and outreach for them. The H&H Coalition doesn't want to play the role of the outsider who enters communities and imposes their services on a "customer." Benjamin noted that "the whole language of the relationships between 'consumer' and 'producer' seems extractive in and of itself." The producer provides the service or the commodity and the consumer receives it, there is no relationship between the two and they do not work together. In this black and white "consumer" and "producer" language, H&H would be the connector between these two groups. Yet to Ben, the most natural and sustainable way to think about our food system is that of a community working together to support one another, rather than just a system of exchange.

"Food assistance should bubble up," says Ben. It shouldn't be a top-down process that is led by the government or NGO assistance programs. This is the point of neighborhood food councils that make decisions from the bottom up. They know what is best for their community because they are a part of it and dependent upon the same assistance programs. The person who is the stipended insider doing this work must be a well-established and well-known community member who is comfortable talking with their neighbors and going door to door to find out their needs. Of course, the issue of hunger is very personal and not everyone is willing to admit they need help from a stranger. It can be intimidating and scary to admit that you need food assistance.

F.A.R.M. Café, a pay what you can cafe in the town center of Boone, is a space where people can come to sit and enjoy a meal while being surrounded by community. The community café setting unsettles this donor/recipient relationship as all are welcome and no one knows the status of those eating there as to whether they have paid more than enough and are volunteering, whether a person is in need, etc. Renee Boughman, head chef at F.A.R.M. Café, describes the space as a place to come together and eat in a way that gives dignity and allows people to share their stories if they chose to. This non profit is unique in that it is a regular operating business restaurant, but food is used as a vehicle to create community. All of the food is purchased, and 95% of it comes from local sources. People are receiving more than just a meal, they are getting a sense of community and becoming a part of something that is bigger than themselves by getting to participate with each other. Renee in a 2019 interview with Tennessee Valley Uncharted says "I don't like the term "give back" because I just feel like we're in it together and there isn't something that I give to you, and there is reciprocity happening all the time." She

prefers to use the term "share" to describe what happens at F.A.R.M. Café rather than give back, because sharing indicates reciprocity from all parties.

In addition to the reluctance people have to admit they are facing hunger by reaching out for help, a lot of people do not even know these services are available or just would not even think about getting in touch with a non-profit organization for help, Benjamin Loomis says. Through these stipended community members, H&H hopes to create an informal mapping of those in need of food in these neighborhoods. By establishing the neighborhood food councils and stipending a community leader, H&H is broadening its reach, enriching the quality of its services, while at the same time creating community and leveling the hierarchy that exists within food assistance programs like F.A.R.M. Café does by opening a shared dining space where homeless people, lawyers, professors, students, etc. can all sit down and eat together.

The non-profit members interviewed expressed their knowledge that the non-profit model of mitigating food insecurity is simply a band-aid solution. The Watauga County census says that 44% of Watauga County qualifies for government assistance, the H&H alone serves only 6-7% of the county population. Though there are many other organizations that provide assistance besides H&H such as, the High Country Food Hub, F.A.R.M Cafe, Second Harvest Food Bank, the Hospitality House, the Watauga County Health Department Double Up Food Bucks, Casting Bread Ministries, Greenway Baptist Church Food Pantry, Mountaineer Food Hub, Western Watauga Food Outreach, Blowing Rock Cares, Little Free Pantry of Boone, the Watauga and Ashe County seed libraries, community gardens, and supermarkets (such as Food Lion) that donate surplus food, there is still a massive gap. Ben says that there are low-income people who will accept and seek out food assistance from non-profits and willingly engage with these institutions. However, there is a much larger percentage of people who need help and do not

reach out for it. "Non-profits don't serve the actual need in the county, they serve the people that come to them for help. It's confirmation bias," Ben says. This is where we see the limits of the non-profit model play out in Watauga, and this is how we know it will require a whole diversity of tactics to get closer to meeting the needs of our community.

Building relationships outside of the consumer/producer and giver/receiver model of food system connections is important for food sovereignty and building social resources within one's community. An example of the importance of social resources is when the COVID-19 pandemic began, there were rising numbers of people who needed food assistance and there were widespread supply chain disruptions. Most of the non-profit food distributors in Watauga buy their food from Second Harvest Food Bank which has a food recovery operation where they work with retail grocers to "prevent food from going to waste by distributing it to local, food assistance programs" (Second Harvest WNC 2021). Because the grocers that Second Harvest Food Bank collects food from were having supply chain disruptions, the food assistance programs that they were distributing to were vulnerable to the disruptions as well. In turn, these food assistance programs started looking more to local food sources to combat this issue. So, the Food Hub for Blue Ridge Women In Agriculture (BRWIA) rapidly scaled its weekly sales. Blue Ridge Women in Agriculture's mission is to "help build an equitable, sustainable High Country local food system by supporting producers and cultivating community connections that educate, inspire, and increase the demand for local food" (Blue Ridge Women in Agriculture 2022). Their goals are to "increase consumer demand for local food, ensure equitable access to high-quality food, and provide producers the support they need" (Blue Ridge Women in Agriculture 2022).

During COVID, BRWIA had a large increase in consumer demand for local food and increased the resources for food insecure members of the community. The sales were also driven

by an increase in community members buying from the Food Hub (in part due to supply chain disruptions). Pre-pandemic weekly sales were at 3,500 and a few weeks later towards the end of March, they jumped to 20,000. The issue was that the Food Hub didn't have enough cold storage for all of the products that were coming through to them. Dave Walker, who helps support AmeriCorps Vista members, has been working with BRWIA for seven to eight years since he started out as a Producer of Programs where he coordinated training for farmers, and he currently serves as the Development Director where he raises money for the organization and helps it connect to resources. Dave reached out to people he knew from different state-wide organizations and was able to communicate with them for assistance with cold storage. Other food pantries also needed additional cold storage because they were seeing an increase in their consumers. This was a phenomenon happening around the state. BRWIA was able to work with Sysco to borrow their refrigerated trailers because of their previous relationships with them. Sysco typically uses its trailers for restaurant deliveries, but since most restaurants were closed during the start of lockdown, they had extra trailers to lend to BRWIA. Dave points out that this instance is a clear example of how having relationships matters as a form of resilience. Showing up consistently and "being able to communicate with people about the work you are doing so they can understand the role they can play in it" is crucial in building relationships.

#### Importance of food self-sufficiency: gardening, food preservation, cooking and freezing

In my interview with Clara Coffey, she also spoke about future crises like pandemics and climate change reflecting Dave's emphasis on the county's adaptability to them. Clara grew up in Watauga, graduated from Watauga High School, and worked with Heifer International on a farm in Arkansas. She later ran an organic farm in Blowing Rock and is now working at the Hospitality House. Clara, having had extensive experience in agriculture, gardening, and food

preservation as a vendor at farmers markets, noted that these skills are essential to food sovereignty, self-sufficiency, and resiliency in times of crises. Clara laments how such skills are becoming lost generation after generation.

"Small scale farming has never been lucrative, so a lot of people now move to the cities, and traditional farming knowledge has been lost," she says. Clara believes that having such skills required for farming, growing, raising, and cooking your own food is essential to gaining food sovereignty. If one has the right knowledge of how to produce, process, and preserve food, they can for the most part provide for themselves. This traditional knowledge still exists in Watauga as many people in the community continue to practice farming and food preservation techniques. The agricultural extension in Watauga has taught pickling and preserving classes for years open to the public. BRWIA hosts High Country Farm Tours that showcase not only farms but also homesteads and gardens that are still lively. At a Watauga Food Council meeting on January 27, 2022, Clara and other members of the council brainstormed ideas for how to develop a skill sharing workshop around cooking, canning, and growing. One project Clara and others on the food council are currently working on is a knowledge sharing workshop for people to teach eachother how to cook large meals and freeze them so they are ready to eat throughout the week. Not only do people need food, they need the knowledge of how to cook it, knowledge of how to preserve it, and the time it takes to complete all of this. Many people who are food insecure often are those who have multiple jobs to juggle, children to feed, and would benefit from learning time saving skills in the kitchen.

During our interview, Clara asked herself how our food system will change even more in the future. "We will have to be flexible," Clara says. Besides, trial and error drastically influence the tactics used by non-profits like the Hospitality House when they form their programs. The

skill share workshop on food preservation and bulk meal preparation that the Watauga Food Council is working on is one tactic that communities or non-profits could implement to connect with community members while distributing food. There is no one-size-fits-all solution to helping people who need assistance. Everyone has different needs: this was one prominent factor that contributed to the concerns of many people surveyed who work at non-profits. They felt they were unsure of their "clients"" needs. This forms the biggest gaps in some of the programs used by non-profits to give food assistance. When there is a reciprocal relationship however, rather than a one sided give/receive relationship, connecting with and understanding community needs becomes easier. This may show that non-profit food assistance programs that are having trouble understanding their communities' needs might want to reevaluate and reform how they are interacting with and "giving" to their community.

#### **The Promotion of Food Sovereignty as a Way To Prevent Crises**

The Hunger and Health Coalition implemented another program along with the neighborhood food councils to adapt to the COVID-19 crises and connect with the community: the mobile food assistance program. This program is a system where volunteer delivery drivers bring food to those who are in need and are home-bound due to illness, single parent duties, unsafe roads, etc. Though this program launched out of the crisis that came about during the COVID-19 pandemic, Ben noted that these forms of programs need to stay for the long term and he is working towards the longevity of this project by hiring a paid community donation driver. Even if the current pandemic subsides there are many other crises that will come about due to climate change.

Transportation has been a historical struggle in the High Country given the curvy roads, often inclement weather conditions, and lack of public transportation in rural areas. Boone is

after all a mountain town, and many of our resources must be imported from down the mountain. Getting around by car can be difficult or inaccessible for many people including semi-trucks carrying resources, like food, up often-icy mountain roads. While the remote geographical location of Watauga already presents issues for food transportation, in the future, as climate change accelerates Benjamin Loomis notes that "we are going to run into supply chain issues. We are on the top of a mountain. It used to take two days to get from Wilkesboro to Boone without the highway. This is not going to be the last crisis in our lifetime." This threat illustrates the importance of geography and its influence on people and food.

The mobile delivery program, which has been in place since 2020, is one example of innovative resilience taking place in the food system of Watauga. This program even draws in volunteers, despite fears of gathering during the pandemic. The program makes it convenient for volunteers to help without face-to-face contact by delivering food boxes to the doorsteps of H&H's clients in the comfort of their own vehicles. Volunteers sign up online, they pick up the food from H&H, and they are assigned a delivery route to complete (H&H website). This type of mobile organizing makes community involvement simple and effective while meeting a prominent need in the community.

In my experience volunteering for the mobile food delivery program, the process was simple and I became connected with Candace from H&H, an organizer for the program. She walked me through the process to complete a short inclusivity training stating their objections to discrimination against minorities, and volunteers were sworn to uphold these values while completing their services. After the training, I signed a few papers and went on my route. Candace offered the opportunity for me to complete the same route next week if that day and time worked with my schedule. This makes it easy for volunteers to keep coming back and form

relationships with those they are delivering to. The first delivery felt impersonal; I just dropped off the food and left. However, I imagine if I were to complete this same route every week for a continuous period of time the receivers of the food may enjoy seeing a familiar face each week. Although this specific program is more impersonal or hands-off, the convenience it offers for both the "givers" and "receivers" makes its longevity more probable in times of crisis.

# **Tourism and Wealth Inequities**

Although the curvy and often icy roads leading up to Watauga County often make it dangerous for people to come up the mountain, this doesn't stop thousands of tourists and students from coming to Watauga for its beautiful scenery, skiing, and lively farmers markets. Watauga has a vibrant food scene in comparison to surrounding rural counties. Carol Coulter, an owner of Heritage Homestead farms, a goat cheese producer based out of Ashe County, has noticed this difference. Carol says that when she sells her cheese at the Ashe County farmers market she never does well in regard to sales because people are not willing to pay the prices she sells her cheese for. She only continues to sell at the Ashe County market every now and then because it's where she lives, but she regularly sells at the Watauga County farmers market. The farmers market in Watauga County is much more open, lively, full of music and activities, like Día Latino, chili cookoffs, and a wide variety of vendors who regularly sell eggs and vegetables, mushrooms, flowers, and goat cheese. In my experience working a stand at the Watauga County farmers market for Springhouse Farm in the summer of 2021, my observation was that there were very few Watauga locals that stopped by to purchase our products. There were mainly tourists, students, or people with second homes in the picturesque mountains who came to visit and support the local economy. The winter farmers market and the Tuesday markets, based on my observation, seem to draw fewer people but more local residents.

Watauga has a unique demographic of people that heavily influence the market. Clara agrees that the Watauga County farmers market is outstanding, and some have even said it is a better scene than what one would find in big cities. There does exist a vibrant culture around food in Appalachia, and the people in Watauga are predisposed to value good food more than many other rural areas. This is also a result of the wealth coming to Watauga from other locations. "We can't have small organic farmers sustaining themselves here without the extreme wealth that is here", says Carol. The income inequality in Watauga County is higher than almost any other county in North Carolina. The percentage of wealth disparity was at 24% in 2019 (FRED Economic Data 2020). Much of the wealth comes from the university, the hospital, and tourism, says Clara. These are also the three main things that are pushing people that have been in Boone for generations out of Watauga. Much of the land is bought up for vacation homes. The people who are coming here are buying up the land that could be used for agriculture, affordable housing, etc. says Clara. However, there is an interesting dichotomy. Clara, a Watauga local who was born, raised, educated, and works and lives in Boone currently finds herself resenting the influx of people who come and at the same time being grateful for them. When she worked as a waitress, she was thankful for the tips wealthy tourists would bring. "These are the people that are paying our bills but also perpetuating the problem and making our bills higher" (due to the cost of living) - Clara.

Abby Huggins, a member of the Watauga County Food Council and my co-worker at Springhouse Farm shared the same lament that the way tourism is happening in Watauga is not sustainable, neither is the way the university is expanding. Abby stated that land distribution and having access to land is a big factor in creating food sovereignty. For Watauga to be food sovereign, access to land would need to be more equitable. There have been several community

conversations about the university's expansion in Watauga and how that has impacted housing prices and land prices in the county. The housing that's being built for students is not at all affordable housing, but rather very expensive. This causes some of the student population at Appalachian State University to be food insecure and affected by the housing crisis.

Laura Brych, the pastor of community engagement at Blackburn's Chapel in Todd, NC., also noted how the housing prices in the town of Boone have forced a lot of people out of the town into rural areas where housing is cheaper and more accessible. However, what people save in mortgage/rent prices living in rural areas, they spend more time and money on gas and driving. Where Laura works in Todd, access to fresh producers is not available without driving into town to Boone. She said there are stores in Todd, but they are all gas station types of stores. They are not real grocery stores where you can get fresh produce and good meals. A 20 minute drive into Boone doesn't sound too bad, but it is definitely not the type of drive one would like to take a second time if they forgot something at the store. Because of the lack of fresh produce in Todd, Todds Table was created by Blackburn Community Outreach group and grew into a 501(c) non profit organization. Todd's Table is a stand that sells fresh vegetables from the Permaculture designed church property in Blackburn. The goal of Todd's table is similar to F.A.R.M. Café, to provide a community space centered around food. Todd's table is meant to increase access to fresh food and provide access to land for those who want to practice farming. The shared land access is a great attribute considering the difficulty of getting access to land in Watauga.

While tourism has increased the cost of living in Watauga and made food and housing increasingly inaccessible there are initiatives to make fresh foods available at farmers markets that are often flooded with tourists at peak seasons. Double Up Food Bucks as Taylor Hochwarth from BRWIA describes is a "healthy food incentive program that doubles the value of federal

nutrition benefits spent at farmers' markets, helping people buy local food while supporting our local farmers and economy." Taylor Hochwarth works as an AmeriCorps Vista member with Blue Ridge Women in Agriculture and just ended their year-long term in February 2022. Taylor is the Local Food Markets and Equitable Food Systems Designer for BRWIA and helps with the Double Up Food Bucks program, the farmers' markets, and a little with the food hub. They work on special events for the markets and their own projects for BRWIA as an organization such as their racial equity initiatives and the local food community resilience series. Taylor's job among all of these goals is to create innovative ways to address gaps in some of BRWIA's programs.

One gap in relationships that BRWIA is trying to fill, through their racial equity initiatives, is working together to become more anti-racist internally and in their programming. Q'Pasa Appalachia has helped BRWIA to achieve this goal. Q'Pasa Appalachia began in 2020 with Yolanda Adams, a Family Resource Coordinator for Watauga County Schools, who also assists several agencies including "Town of Boone Police, Watauga County Department of Social Services, and the Children's Advocacy Center in communication with the Latino community" (Boone Area Chamber of Commerce 2022). Q'Pasa is an organization that began as a "bilingual video podcast series... to teach Spanish-speaking residents about products and services provided by local area businesses, while giving those businesses a chance to break the language barrier to connect with new audiences" (Boone Area Chamber of Commerce 2022). Q'Pasa Appalachia came to one of the Watauga farmers markets to film the events and the vendors and translate to Spanish the services offered at the market such as Double Up Food Bucks. After this, they began working with BRWIA more often.

Taylor says "we don't see a lot of Latinx people at the market. Partly because of the language barrier and partly because people don't know about it or they're not comfortable

coming." Farmers' markets can be an intimidating space for people of color, as the market has been a traditionally white-dominated space. Alternative food movements are predominantly White and middle-class in character, and subtle exclusivities are apparent in these spaces (Alkon 2011). Farmers markets used to be spaces where slaves could be sold for auction as well. Cheapside Park, in downtown Lexington, Kentucky, used to be the areas main marketplace in the 1800's and was home to a large slave market prior to the end of the civil war (Twitty 2017). Due to historical and present-day cultures around farmers markets and alternative food spaces, it is clear why communities of color may not feel welcome in these spaces.

Taylor says they are grateful for Q'Pasa and the help they have provided to BRWIA to "figure out things that we were missing that we could do better to make that space more comfortable and accessible for the Latinx community." Ellie Mullis, a previous VISTA volunteer, also contributed to some of this work translating Double Up Food Bucks brochures into Spanish. BRWIA now has a contract with Q'Pasa where Q'Pasa will translate materials for BRWIA in Spanish, and BRWIA is able to consult Q'Pasa for assistance on their racial equity goals as part of the contract. For example, if BRWIA has a question about which stores they should post flyers in to grab the attention of the Latinx community, what is culturally appropriate at events, etc. they can ask Q'Pasa. Taylor appreciates the relationship they have with Q'Pasa because Q'Pasa has so many close connections with community members and now BRWIA is also able to make more connections.

The first "Dia Latino" was hosted by Q'Pasa Appalachia and the Immigrant Justice Coalition in the summer of 2021 at the King Street Market. Q'Pasa gave out five-dollar vouchers to everyone as an incentive to spend at the stands of local vendors, and the highest customer count that this market has ever had was on "Dia Latino." That day, "Escobar Rustic Crafts," a

Latinx vendor, was a guest vendor at the market, and they have now become a permanent vendor at the winter farmers market. Not only are Latinx people being encouraged to shop at the market and given financial incentives to do so, but they are also being welcomed as vendors and collaborators. Yolanda Adams went above and beyond in her role as a liaison between the Latinx community and BRWIA by using her platform to share resources and, as Taylor notes, is very personable at the markets. Yolanda would walk around with new people at the market, introduce them to the vendors, and show them how the Double Up Food Bucks program works. As a person of color who may not have perfect English-language skills entering a predominantly white and English-speaking environment, there is bound to be discomfort. Having someone who looks like you and speaks your language to guide you through this space is probably a very comforting thing.

Although Día Latino has introduced more diversity into the farmers markets in Watauga, there is always more work that can be done at farmers markets to emphasize culturally diverse cuisines and culture and encourage community support of farmers of color. Community food movements must be anti-racist to be "community" food movements and White people must consider their unconcilous habits of expressing their privilege in these spaces. "No space is race neutral" so acknowledging the whiteness of farmers markets and actively working against the exclusiveness of this space is a good step forward, rather than looking "colorblindly" upon a space (Guthman 267). Lastly, it is important to note that although farmers markets are ways for consumers of food to connect with producers of food, these are still market-driven-institutions and do not get at the root issue of food insecurity (Guthman 271).

#### **Participatory Mapping**

Another gap that Taylor has been working to address is how to make more accessible the free food resources that are available through BRWIA. This might look like creating a delivery program like the H&H has done or a workshop for how to cook the food BRWIA distributes like the Watauga Food Council is doing. Through the lens of looking where to fill in the gaps of BRWIA's services, Taylor came up with the idea of a listening project for food sovereignty in Watauga. Taylor had attended a community listening interview-training hosted by Cooperate WNC (Western North Carolina) earlier in the year and became interested in being an interviewer in their own community. People who identified as community leaders or people who were already involved in local foodways stayed after the training workshop and talked with the leader about how to start the process of community listening when they got home. The leader of the workshop sent people home with resources for how to conduct interviews. Now Taylor says they are in the process of coming up with interview questions. Taylor and I discussed how the knowledge I am gaining through my research may be helpful for the listening project and how the listening project might be helpful for my research in return. Right now, they are shifting away from working with Cooperate WNC because of time constraints, and they are working on finding someone to take up the project because Taylor's term as an AmeriCorps Vista with BRWIA is about to end. This points to the challenges of organizations that rely on the AmeriCorps VISTA program in that it brings in highly talented and motivated recent graduates, but their terms are relatively short, leading to projects getting cut short or lost in the transition.

From what Taylor has explained to me so far, the interviews for the listening project function a lot like the interviews I am doing for this study. Taylor is using the snowball interviewing method, as am I. Taylor expressed that one of the most difficult parts about interviewing and finding people to interview is how to reduce the feelings of extractiveness that

come with reaching out to people. Using the snowball method eases feelings of extractiveness because the interviewer begins by talking to people in their own circle, and through those people, the interviewer creates connections with others outside of their circle that they might not normally connect with. This is another important aspect that comes about during the process of listening projects and participatory mapping projects; people form relationships. Dave expressed his hopes in Taylor and I's work. Dave advised that in spearheading these projects, we should create space for the participants to spend time with each other in community so that people feel encouraged to share their ideas. For any participatory approach, trust is necessary for people to be willing to share. When working on these projects in isolation, ideas and possible plans of action are limited to the confines of one person's mind. As Dave says, by forming "relationships with those people standing around the table working on a participatory map, then they feel more comfortable with each other. If there is a crisis they can feel comfortable reaching out to each other. Getting to know each other and getting to know the people involved in the project together is just as important as the data that is generated from the projects."

Taylor had considered paying people to take part in the interviews but found that this might contribute to feelings of extractiveness, and it would be better to find a more subtle way to give back to participants. Taylor says that sometimes it is better to go get coffee with someone for the interview and pay for their drink. Taylor doesn't want the interviewee to feel like BRWIA is "trying to get this information from them, and they're going to pay, and its this whole transactional thing" (Taylor). Taylor wants the interviewees to feel like they have a stake in this project and that they are a part of the conversation. Taylor wants to thank the interviewee in some way for putting their energy into the project and recognizing their agency in the situation

but doesn't want the interview to feel transactional. BRWIA provided funding for Taylor to buy gift cards from coffee shops so that the listening project feels more relational.

BRWIA did a participatory food mapping session a few years ago as part of their strategic plan to see the gaps in Watauga's free food resources. I asked Dave Walker about this project to see what I could gather about their strategies and how they could be implemented in a re-mapping or future mapping project. The person who spearheaded this project was an AmeriCorps Vista member at the time. She was a non-traditional VISTA member because she had a Ph.D. in organizational psychology and another full-time job. She worked for large corporations and other large non-profits making maps similar to the one for BRWIA. Dave wasn't comfortable giving out her name or contact information to be interviewed for this study because he knows this person is often busy. It's uncommon that someone with a Ph.D. who already has another job would take on such a project, but the reason for this person's involvement aligns with the reasoning for many community organizing projects. She wanted to connect with the community. She was working remotely for large corporations and wanted something that would keep her in Boone for daughter's last year of high school. This is what community mapping projects are for. They're not only about the data that is found after the process but also about the community that is built during it. For this VISTA member, the mapping project was more about the journey of connecting with community rather than the destination of completing the project. After all, she had already done many mappings like the one for BRWIA for many other organizations, and she chose to take on this project specifically for the community aspect rather than for the project itself (which wouldn't have been new to her).

The process of creating the map was very simple, Dave said. All they needed was a big piece of paper, sticky notes, and markers. BRWIA staff, BRWIA board members, other food-related organizations, agricultural extension, farmers, etc. stood around a table, added what organization offers which services, and where they are located. They went through almost 15 iterations of the map in total, and a retreat was held to analyze the map and what was missing. After everyone added their connections to the resources on the map, they had a conversation about what is not on the map. One thing that came up was a shared community kitchen, which Ross from F.A.R.M Cafe had brought up in our interview as well. Because F.A.R.M. Cafe has such a small kitchen, they are looking for a public kitchen in which to cook their food, but sometimes they have to rent spaces in private facilities.

The purpose of creating this map for BRWIA was to think about the programs BRWIA already offers and to assure that they do not duplicate services that are already offered by other entities. At the time this mapping project was taking place, BRWIA had numerous different programs operating. After the mapping project, they decided to focus on three areas to increase the demand for local food, ensure equitable access to local food, and support producers, following their mission statement. They transitioned away from a few of their programs, some more gracefully than others, and focused their efforts on what was viable for the organization at the moment. BRWIA went through a leadership transition during the time of the mapping project that affected which programs they were able to continue. They also lost their biggest funder at the time which limited their freedom to provide all of the services they might have wanted to offer to the community. "When your capacity shrinks as an organization you lose staff because of funding and you have to focus on the things that matter and generate revenue," says Dave. Due to some of the cutbacks that occurred due to the change in leadership and loss of funding,

BRWIA decided to hunker down on three important services: the food hub, farmers markets, and the Double Up Food Bucks program.

The participatory mapping project was just one part of BRWIA's strategic plan to adapt to all of the changes happening at the time. The role that participatory mapping may play in Watauga, as it has played for BRWIA, may only be one part of a whole plethora of tactics that need to be employed to build community and resilience. As a part of Watauga's "strategic plan" towards food sovereignty, participatory mapping may serve as a way for people to not only make connections of physical resources that can be placed on paper, but also a way to build social resources among the people that are takirealng part in the mapping process. The people joined together in such a project are likely invested individuals who care about their neighbors and have resources to share, even if they are not attached to an entity or are not necessarily "mappable."

Dave was on the call when Taylor and I were discussing our collaboration for the listening project. Dave suggested that Taylor and I talk with AppalCART, Watauga County's public transportation system. Dave asks about AppalCART: "why don't their routes go to certain stops? Why isn't the farmers' market or food hub labeled on the map of their routes?" He told me that the Asheville<sup>5</sup> version of AppalCART has the farmers' markets labeled on the bus route. "It's very low-hanging fruit," he laments. Because it is known that transportation is a large issue affecting those who struggle with food insecurity, and people that are food insecure are often dependent on public transportation, they may benefit from having the AppalCart route maps indicate stops for the Watauga farmers' market, the Tuesday market, the Winter market, and Food Hub, etc. AppalCART largely serves the town of Boone rather than Watauga County as a whole. There are many rural areas that are left out on its routes, and with there being a recent shortage of drivers amid the pandemic it doesn't seem like those routes will be expanding

<sup>&</sup>lt;sup>5</sup> Another mountain town an hour away from Watauga.

anytime soon. I haven't had the chance to speak with AppalCART during my research, but as Taylor, myself, and others move forward with the listening project, this will be a base to cover.

Dave's questions about the map of the AppalCART route tie into the critical cartographic theory of how maps have the power to shape our lives, realities, and worlds. Maps visually demonstrate what is considered "important" or "mappable." Maps also have the power to obscure existing resources when they do not include certain markers and information about these resources. Those who created the map of the AppalCART route may not have considered the food hub or farmers markets to be worthy of mapping or labeling as a stop. Yet, these areas in the community are crucial access points of fresh or free food for Wataugans. Who is included in the map making and what is labeled as an "asset" by those people making the map is crucial to the integrity of the map. The way these important resources are and are not displayed has direct effects on people's day to day lives.

# 5. Discussion

It is clear, based on the interviews and literature discussed in this study, that building intentional community around food is one of the most important aspects of organizing for food sovereignty. It was found that food assistance creates dependency and does not address the root causes of food insecurity, nor does it require building connections with neighbors and sharing a mutual sense of aid and support. As examined in the theory section on post-incarceration food assistance programs, the most successful programs were ones that built community through food and provided a support system to participants. Building community was also something Dave Walker suggested be the main focus of a future food asset mapping project. Building community could look like spending time in company with neighbors, sharing a meal, planting a garden, etc. This can manifest itself in many different and creative ways through "integrating cultural work with traditional community organizing techniques" (Khan 86). Forming lasting relationships and connections within communities is a way of building resilience. Clear examples of resilience already taking place in Watauga are the Hunger and Health Coalition's mobile food delivery program and BRWIA's connection with Sysco that both rapidly adapted to the unprecedented changes happening due to COVID. Not only are thriving community connections key to surviving during crises such as a global pandemic or climate change, but it is key to building sustainable food systems.

The existence and continuous construction of such resiliency and community-building programs offered by non-profits in Watauga show that there already exists bountiful food and social resources in the area. These resources include Double Up Food Bucks, a community built through Día Latino, free food delivery services available through H&H, the access to land and cultivation through Todd's Table, opportunities to get paid for being a community leader through the neighborhood food councils funded by H&H, and much more. These programs show the dedication of community members and non-profits to a more food sovereign Watauga and suggest that food-based community organizing and holistic food assistance programs are not entirely lacking. Some non-profits who provide food assistance tend to fall short when it comes to integrating community voices and leadership into their programs, such as those that do not offer community space and only donate food without opening the opportunity for community members to be co-participants in the process of food assistance. Non-profit food assistance typically is a band-aid solution to the issue of food insecurity. However, not all non-profits follow this trend. Some organizations like the Hunger and Health Coalition take advantage of the power and resources they have to create real systemic change and place that power into the hands of community members. The Hunger and Health Coalition is doing this by building community through their neighborhood food council projects and empowering community leaders, giving them a sense of agency and paying them to do so.

The Watauga Food Council, led by many local non-profit members, empowers their community through listening and lifting up the voices and knowledge of community members through validating their skills in peer-educating skill-sharing workshops on how to cook and store food. The Watauga Food Council also has accomplished an array of achievements like distributing grant funding to local food pantries, enacting edible landscaping in downtown Boone, and providing support to local farmers through the High Country Local Grown certification program (Watauga Food Council 2022). The Hospitality House works to equip its people to become "self-sufficient and productive" through a variety of support programs from housing, to food, to gardening, and more. Although many non-profits can fall into complacency,

when these organizations are led cooperatively by people invested in the community, they get closer to addressing the root causes of the issues of which they are working to mitigate.

There has been a lot of food-based work done in Watauga over the years. Many of the strategies offered through some of the most successful post-incarceration programs are already taking place in the county. The Hunger and Health Coalition provides healthcare, the Watauga Food Council practices skill-sharing, the Hospitality House offers gardening rehabilitation, and BRWIA practices lifting the voices and stories of those most affected by food insecurity through their community listening project and provides a market for local farmers through the food hub... Almost all of the members from the non-profit organizations that were interviewed recognized systemic inequalities and root causes of hunger, focused on creating networks of support systems, and facilitated community involvement and participation through their programs. Blue Ridge Women in Agriculture has already completed a food asset map of resources offered in the county. While this map mainly focuses on more formal food resources and doesn't recognize the colonial language of the food asset mapping itself, the purpose it served was to evaluate what services were missing from the map and which ones did not need to be duplicated. This map could benefit from including Indigenous and non-expert perspectives to highlight more informal assets while critically countering the power hierarchies that exist within food assistance programs. By examining the practices of Indigenous mappings and the promises of counter mapping it is seen how "professional" map-making can leave out different perspectives (Wood 1992). There is room for another participatory mapping session through an indigenous framework of kinships that recognizes more informal food resources.

# **Expectations**

When I began this study and first started conducting interviews, I expected that I would be able to speak with community members who had more knowledge about informal food assets in Watauga. Using the snowball interview method, I found that once I got in contact with one non-profit member I was constantly referred to speak with more non-profit members. Due to this, I mainly discovered food assets in the form of programs and services offered by these organizations that the interviewees belonged to. Although I had wished to discover more informal food resources, I was pleased to hear about all of the innovative program ideas such as that the non-profits were organizing. Another expectation that I held was that people from non-profits would not discuss the fact that food assistance is a temporary solution to the issue of food insecurity. Based on the literature I had read about food aid, it seemed as if non-profits can be self-congratulating at times and do not focus on organizing to end the root causes of hunger. I was pleasantly surprised that the non-profit members I interviewed were self-aware and recognized that there is more work to be done on a systemic level. I was also surprised at how welcoming the non-profit members were and how passionate they were about helping me with my research and connecting me with people that could answer my questions.

The results suggest that because of all the free food resources that exist in Watauga and the close-knit relationships that form around them, what is keeping people food insecure in Watauga may be due to systemic inequalities, the history of poverty in the area, and the wealth disparity that commonly exists in rural college towns (such as Asheville). This shows that while participatory food asset mapping may contribute to existing community organizing strategies in the county more time and continuous effort are needed for these strategies to create results. Based on the findings of studies in the literature review, community-organized efforts need to be more inclusive and focused on bringing resources, services, and support to the marginalized

communities that need them the most. A plausible explanation is that of what Benjamin Loomis mentioned about confirmation bias: "Nonprofits are the palatable form of help for anyone who has this idea of doing something good in the world. They also are the least restricted entities in a community. But non-profits do not serve the actual need in the county, they serve the people that come to them for help. It's confirmation bias." The same goes for participatory food asset mapping and other strategies for community organizing, they can only efficiently help those people who are involved in them. The outreach design—who you reach out to and how—is critically important for participatory food asset mapping. Food-based community organizing and participatory food asset mapping only serve the needs of the people that participate in them. Therefore, inclusion and bridge-building between segregated communities are key.

The term "counter-mapping" coined by Nancy Peluso and Dennis Woods's explanation of the hidden interest that exists within maps, perfectly captures the power map-makers hold in shaping worldviews and food access. Maps reflect sentiments of what is culturally and socially valuable or worthy of being mapped. Because the power of creating maps has typically been reserved for the hands of those with extensive technical knowledge—and there exist several barriers to marginalized communities from obtaining access to such technical knowledge—the power to make maps can be exclusionary and can further marginalize communities. As has the decision-making power over what counts as a "resource"—those resources typically being those which contribute to the capitalist market. Although maps made by non-profits are not used in this way, the language used in them is tied to attempts to attract donor funds. Non-capitalist and food sovereign perspectives have been left out of maps, and marginalized communities, the poor, and the non-experts have been left out of the map-making process. If they were included, they could create maps of resources that would shape worldviews in a way that accommodates the poor, the marginalized, and the displaced. The Providence Foodshed Justice Project map does this as well as the Utah Resilience Map created at the #MapJam event in Salt Lake city that highlighted community resources and and lead to collaborations between existing sharing projects in the area (Llewellyn 2016)

This study provides new insight into the relationship between the power of map-making for the marginalized, and the importance of participatory community building around food. If communities that struggle with food insecurity are left out of conversations and iterations of food access, it is impossible to encompass the entirety of what might be helpful and get to the root of the problem. This is why inclusion is important. To reclaim power over the food system, communities must work against the dominant style of decision-making and aid giving. Focus on inclusion, mutual agreements, and mutual aid (Trauger 2017).

#### Acknowledgment of Limitations

The above claims can be drawn from this study, but there are limitations to what can be concluded based on the methods, sampling, and limited time of this study. Due to the fact that many of the interviewees were experts in the field, I was unable to gather public opinion on the Watauga food system from a randomized sample of Watauga residents. Since I have only lived in Watauga for three and a half years, I lack significant observations of the way the foodscape of the town has changed over time. Due to the limited time of this study, I was not able to interview members from every food-based organization in the county, and therefore, this study does not show a full picture of what resources are available.

It is beyond the scope of this study to address the questions of whether or not there is a community desire for participatory food asset mapping, what food insecure people see as the root cause of food insecurity, what Indigenous perspectives might contribute to a participatory

mapping project, or how effective participatory food asset mapping is at increasing the accessibility of the resources displayed. To answer these questions, more in-depth research must take place.

## Key Take-Aways

Since most of the food assistance organizations interviewed in Watauga are led by people who know the community well and have served in the area for a number of years, they are able to understand the needs of the community fairly well. However, a few interviewees such as Benjamin Loomis expressed that sometimes he is unaware of the certain needs of the people the Hunger and Health Coalition serves. Sometimes the types of food the H&H's clients want or what their dietary needs are is not known by the people at the Hunger and Health Coalition. This is one issue that comes from outside entities providing food assistance: lack of knowledge of the real needs and preferences of the communities they are serving. This is where the neighborhood food councils come into play to help relay community needs to the Hunger and Health Coalition. Clara from the Hospitality House brought up this topic when she discussed her frustration with attending meetings with "experts" on food insecurity. Clara spends almost everyday with homeless and food insecure people at her job and understands their daily lives. The experts are not the ones who spend every day with food-insecure people, and they sometimes propose "solutions" that are not realistic for the needs of the community. Top-down food assistance programs are not effective in creating long-term change, and if this is their goal, they must work to incentivize programs where food assistance "bubbles up," as Benjamin Loomis says. Those who know the most about food insecurity and often hold the best ideas for solving it are those that are face to face with food insecurity every day. They should be the ones included in decision

making. Top-down entities led by people who have never faced food insecurity will not be effective in mitigating it.

Food assistance that is not simultaneously working to end root causes of hunger and is not relational or capacity building only creates a dependence on that crutch. In other words, if food assistance is impersonal and one-dimensional through a strictly giver/receiver relationship it will not be as effective. Food assistance can be a good and helpful thing if there is not such a transactional relationship dynamic. Food assistance can be helpful if it is centered around community and self-sufficiency. It is also important to remember that some elders, disabled people, people with mental health issues, etc. may not be able to become totally self-sufficient. It's crucial to recognize that self-sufficiency is not always an option for everyone, and that's okay. Organizations and communities are meant to lean on and support one another. People do not need to feel ashamed for leaning on their neighbor. It is shameful, on the other hand, if our communities are so estranged from one another that it is not acceptable to even ask your neighbor for a cup of sugar from time to time. People shouldn't have to rely on outsider organizations for help. Relying on organizations is not sustainable given the power relations that exist within them and their ability to take away that assistance at any given time. Organizations like the Hunger and Health Coalition, the Hospitality House, F.A.R.M. Cafe, and more that are focused on building community, are creating real change on a local level.

Food-based community organizing has the opportunity to create holistically assembled action plans for food sovereignty in a participatory manner. Food assistance, on the one hand, doesn't imply that those who receive food assistance are participants in a reciprocal relationship. Through food-based community organizing, everyone has a stake in the effort and is able to give as well as receive aid. Mutual aid facilitates community involvement and offers a sense of

empowerment and agency to the participants. As seen in some of the studies from the literature review, skill-sharing and peer education are important for organizing around food sovereignty. Not only are people being educated on skills for basic survival that can help them in their everyday lives, like being able to process and preserve food, but they are also given a sense of agency when they are invited to the table to share what skills they may be able to offer as well. The project that the Watauga Food Council is working on—a skillshare workshop series about bulk food processing held at F.A.R.M. cafe—invites participants to bring what knowledge they may hold and share ideas. The food council would facilitate and host the workshop but participants may bring knowledge such as recipes, knowledge of canning, how to measure out portions, etc. With this, the workshop opens a space for collective knowledge production and capacity building, providing a sense of agency and community to those involved.

There are a plethora of methods to increase participation in the food system through community gardening, community meals, peer education, and more. Participatory food asset mapping is just one option from a selection of tactics. There exist significant gaps with this method as well. The language of "assets" and "resources" alter the way food and community are seen. Similarly with the language of "consumer" and "producer" that Ben pointed out as being transactional. If a future food asset mapping project were to take place in Watauga it might not even be appropriate to name it as such. Maybe food "kinships" would be more sensible considering Indigenous frameworks (Morrison 2016, Soma 2022, Todd 2017). The language of "kinships" centers the relationship between people and the land, rather than viewing the land as something that resources must be extracted from. The language of kinships can also relate to and enhance the inter-human relationships between community members, farmers, and "consumers."

divide communities and justify the exploitation of one group by the other and vice versa. This language is not questioned enough, and a new vocabulary that humanizes relations to the natural world is needed for food sovereignty.

Participatory food asset mapping is not a tool solely designated for experts or professionals. With available DGPM tools such as Google My Map, Epicollect, UMap, and OpenStreetMap mapping can be made available to anyone. Food asset mapping is not only used by city planners, land use evaluators, social planners but also by non-profit organizations to evaluate the programs most needed in a community. Due to the fact that non-profits have limited resources and depend on donors for funding, they must spare what services they can offer and make sure they do not duplicate work that is already being done. This was the purpose of food asset mapping for BRWIA. As noted by Marek, "as definitions of food assets vary so do motivations for mapping them" (65). For BRWIA, the definition of food assets were those programs or resources being offered by different organizations connected to the people doing the mapping. Dave Walker noted that some more informal food assets or projects that individual community members are working on may have been left out. Nevertheless, food assets for BRWIA were defined as food-related services offered by other organizations, which means their motivation for the map was to determine what services didn't need to be offered twice. Just because this map has already been created for Watauga does not mean that it is the only accurate or useful one. There could be maps of solely informal food "assets" or food kinships that center relationships between people and food rather than services offered by organizations.

# **Recommendations**

What is recognized as an "asset" and who is invited into the conversation towards identifying them is another consideration for a future participatory food-based mapping project

in Watauga. The community listening project that Taylor from BRWIA is working on would be a good way to discover what barriers to inclusion exist in Watauga. Connecting with community groups that serve to bridge the gap between minority populations and local food projects, like Q'pasa Appalachia, would be another way to reach out in a non-extractive or tokenizing way towards marginalized communities. Recognizing and validating the stories of these communities, lifting up the voices of those who are often silenced, and building long-lasting relationships are all things that need to be done to create a more inclusive, sustainable, and holistic food system.

Through this study, I hoped to discover how to include communities in decision-making around food distribution and broader food system challenges in Watauga. To understand inclusion, I first needed to understand what barriers existed for Wataugans to participate in food council meetings, skillshare workshops, community meals, etc. In order to make these spaces more accessible to the general public, I gathered a few strategies for inclusion based on the literature and interviews. One strategy that I understood as a way of fomenting participation was to stay away from using academic or technical terms when having discussions. Using academic and technical jargon leaves out those who do not have access to higher education and might make people feel uncomfortable participating. Other strategies included scheduling meetings during non-working hours so that working-class people have a chance to attend; offering childcare for single parents; offering online or recorded versions of the session; and offering incentives for participation. Incentives for participation could include food, drinks, cash vouchers, gift cards (especially those that help to support the local food system), etc. Build relationships with and invite liaisons from marginalized communities so that participants can identify with the people in attendance. Advertise the event in multiple languages and on diverse platforms on and offline. Provide transportation for participants or plan so that the venue is

accessible by public transportation. These strategies and more are possible ways of including non-experts in decision-making around food distribution and broader food system challenges in Watauga.

Lastly, to solve the issue of food insecurity, there must be a concerted effort to recognize, address, and strategically act on ending the root causes of it. Some root causes may include poverty, discrimination, capitalism, displacement, and much more. As seen through the example of the Free Breakfast for Children Program led by the Black Panther Party, building consciousness of these root causes was central to their movement. Incorporating strategies, such as educating the youth so that they do not grow up with preconditioned stigmas in their minds about food insecure people, can make food insecurity less shame-inducing. F.A.R.M. Café helps reduce the shame that is surrounding food insecurity because they reject the "soup kitchen" formula. With more education about systemic circumstances that lead to food insecurity, rather than blaming it on a person's character, people's willingness to ask for help may increase. When interviewees were asked what they thought were some of the root causes of food insecurity in Watauga, many mentioned the issue of housing. Due to predatory landlords and second home buyers from out of the state buying property that could be used for affordable housing, farming, gardening, etc. many people cannot afford to live in Boone. There are more affordable housing options in rural areas, but they are far away from the town center that has grocery stores, jobs, and other resources. Todd's table, the mobile food delivery program, and the food hub help to resolve the transportation issue. Housing forums have been proposed by the Hospitality House to combat the issue.

It is important to note that many of the programs and organizations that are doing this important work and digging deeper into root issues are in their early stages of development.

Visible progress moves slowly, but there is hope for change. Of course, many of the issues that cause food insecurity are intertwined with many national and global issues as well. To detangle this web of origins takes research, time, and continuous effort. Although numbers may show that the situation in Watauga is not improving, especially since the COVID-19 pandemic, this doesn't mean that there are not people working towards building a better Watauga. Food insecurity still persists in Watauga despite the numerous free food resources available in the area because people may be unaware of the new opportunities and resources popping up, and it takes time to spread the word about them.

## 6. Conclusion

Members of non-profit organizations who are experts on the Watauga food system (Benjamin Loomis, Clara Coffey, Dave Walker, and Taylor Hochwarth) were interviewed alongside other community members (Abby Huggins Laura Byrch, and Carol Coulter) and consulted for their views on the food system and the current state of food insecurity in Watauga. Observations and field notes were made from my experiences volunteering for F.A.R.M. Café and the Hunger and Health coalition, interning at Springhouse Farm, and attending Watauga Food Council meetings. Throughout the course of this study, various existing free food resources were discovered and potential new programs to foment more community participation and interaction with these resources were discussed. It was found that new programs, such as neighborhood food councils organized by the Hunger and Health Coalition and the community listening project facilitated by Taylor Hochwarth, are signs of change in the food assistance landscape. The success of the Food Hub (including new satellite locations) and the growth of the Watauga Food Council are additional signs of improvement in food assistance programs in Watauga. Many of the non-profit organizations that provide food assistance in Watauga are attempting to include community members in decision-making and organizing while building meaningful relationships that get rid of the typical transactional style of food assistance programs. Community members are being given a sense of agency and purpose in the food system rather than solely being receivers of assistance.

Literature on community organizing and holistic food assistance were also consulted for the purposes of making connections between what other community projects, such as the Providence Foodshed Justice Project and Planting Justice, are doing around the world to foment inclusion in the food system and comparing that to what is being done in Watauga. To induce

community participation in decision-making about food distribution and broader food system challenges in Watauga, the spaces where these decisions are being made need to be more accessible to the general public. In these spaces, the voices and stories of marginalized communities and those who have first-hand experience with food insecurity must be uplifted and recognized. To increase participation in the food system, reciprocal relationships must be built and participants must feel as though they have a stake in their future and their community's future. They must also understand their agency in their own lives and the lives of their neighbors.

Poverty can be isolating, and being food insecure can cause people to feel shameful when asking for help, or may cause some people not to reach out for help at all. When an outsider comes into a community to offer food assistance, the food insecure are less likely to accept this assistance or admit that they need it, to the outsider. On the other hand, if a friend, family member, or neighbor who shares the same struggles reaches out to someone who may be struggling, that person is more likely to accept help and open up about their troubles. To build up local organizing capacity for food sovereignty, insider community leaders are needed rather than outsiders who impose aid on communities. F.A.R.M. Cafés approach and the neighborhood food councils are good examples of forms of food assistance that take away the feeling of isolation and the imposition of outside entities. Spending more time in communion, breaking bread with one's neighbors, and offering support in more ways than just with food are a few ways to build a grassroots movement for food sovereignty.

Celebrating the bounty that exists in our communities rather than solely focusing on the deficits and mapping out spaces for resistance to the dominant capitalist-driven market of foodways can bring more power to those spaces through recognition. Participatory mapping makes space for diverse geographical perspectives and visual representations of a food sovereign

society. Participatory map-making can be used as a tool for inclusion, community building, and action planning. Maps, like most tools, are double-edged swords that have traditionally been held in the hands of those with technical, professional, or academic knowledge. They can be utilized with a colonial agenda, or they can be ways of fomenting resistance and recognizing the multiplicity of knowledges that exist outside of the technical and professional realm as seen in the Providence Foodshed Justice Project that countered the USDA "Food Desert Locator" map which portrayed Providence neighborhoods as food deserts or areas without access to food in large grocery stores.

The methods that were used for this study do not reflect the diverse knowledges that exist in the Watauga County food system because the participants of the study were all experts who have studied or worked in the food system for years. Nevertheless, these interviews did help to answer the research question of what free food resources already exist in Watauga County. The interviews provided a good sense of what strategies have been tried, or are in the process of experimenting with, to build stronger, more sustainable, and just food systems. The interview with BRWIA also provided a basis of understanding for how food asset mapping has been carried out in Watauga, and what its successes and shortcomings were. Future participatory mapping projects will be able to draw from this study for ideas of how to form the project and shape what they would like to get out of the mapping.

To better understand the implications of the results of this study, future research could approach conversations with non-experts for their knowledge and compare the understandings on food insecurity issues from those of experts to those of non-experts. This may give a different perspective on the issue coming from those who experience food insecurity first-hand. More research could also be carried out to put the theory of participatory food asset mapping into

practice. A participatory food asset mapping project could be facilitated by the researcher and observations could be made as to what the participants considered as "assets" and how participants went about making decisions about what to include in the map. The researcher could measure the amount each "asset" is used before and after the mapping project to see if the map increased public awareness of such resources. It could also be measured, through interviews or surveys, how participants in the mapping project felt, interpreted, or processed the activity. Did they make new relationships? Did they feel a stronger sense of community? Did they feel like they had a sense of agency or power when partaking in the project? All of these questions could be answered to address the sentiments that arise from such a project and how it contributes to community building.

This study assesses the local food system of Watauga county which is an important part of bettering it for future generations. In assessing food systems, we must also assess the relationships that exist within them and gaps of inclusivity. This research contributes to the border literature on food sovereignty and community organizing. While this study does not raise concrete solutions to the issue of food insecurity, it does offer strategies for organizing and collective decision-making about community food issues. By providing novel insights into the relationship between the power of map-making for those who have been traditionally left out of the process, and the importance of participatory community building around food, I have challenged existing assumptions about the validity of expert-technical knowledge and its supremacy over informal knowledges. I also challenge the notion of transactional, one-sided, food assistance and its ability to effectively address food insecurity.

The language of food is also questioned in this study, and an Indigenous linguistic framework is taken into consideration. The roles of "consumer" and "producer" were found to

describe transactional relationships around food rather than a communal one. The terms "asset" and "resource" are also questioned when referring to "participatory food asset mapping," as these terms offer that these "assets" should be justifiably exploitable or protected, depending on who is defining them. In future studies or mapping projects, the Indigenous linguistic framework should be used to humanize and decommodify relationships to food and between humans (Todd 2017). Language shapes thoughts, and if we are constantly talking about food as a commodity then we will think about and treat it this way. In future studies and projects, "kinships" may be a better way to talk about "assets" and "resources."

This study was meant to encourage readers to take a step back and learn from others before acting or imposing ideas and objectives onto a community before considering whether or not it is needed or wanted. Through this research, stories of past communities and community leaders are recounted and analyzed. Drawing from their techniques, the benefits and drawbacks of these projects are applied to how similar projects might play out in Watauga County. After learning from other communities, more learning was done about the Watauga community through interviews and observations. Collecting stories, opinions, data, and experiences through this study has laid the foundation for future research on participatory food asset mapping in Watauga and other community organizing strategies.

In conclusion, state-based food security programs are often only temporary solutions to the issue of hunger, and communities would benefit from coming together to build more resilient food systems that rely on local kinships rather than commodities. Mapping where to find community food resources is one step along a lengthy process of creating food sovereign spaces. This study only represents the pre-implementation stage of a larger potential participatory mapping project in Watauga County, North Carolina through learning from the experiences of

others. The next stage is to gauge community support and later measure the effectiveness of such a project. This academic study intended to simply observe what other communities have achieved through food-based community organizing, discover what decommodified food resources exist in Watauga, and explore the role that participatory food asset mapping plays in the county.

## 7. Bibliography

- Alkon, Alison Hope, and Julian Agyeman, eds. *Cultivating food justice: Race, class, and sustainability*. MIT press, 2011.
- Blue Ridge Women in Agriculture. 2021. "Our Mission." Blue Ridge Women in Agriculture. Accessed March 2, 2022. <u>https://www.brwia.org</u>.
- Boone Area Chamber of Commerce. 2022. "Annual Membership Meeting." Boone Area Chamber of Commerce. Accessed March 3, 2022. https://www.boonechamber.com/annual-membership-meeting.
- Brady, Shane R., Jimmy A. Young, and David A. McLeod. "Utilizing digital advocacy in community organizing: Lessons learned from organizing in virtual spaces to promote worker rights and economic justice." *Journal of Community Practice* 23, no. 2 (2015): 255-273. <u>https://doi.org/10.1080/10705422.2015.1027803</u>.
- Clapp, Jennifer. "Corporate interests in US food aid policy: Global implications of resistance to reform." *Corporate power in global agrifood governance* 125 (2009).
- Crampton, Jeremy W., and Jonh Krygier. "An Introduction to Critical Cartography." *ACME: An International E-Journal for Critical Geographies* 4, no. 1 (2018): 11-33. <u>http://beu.extension.unicen.edu.ar/xmlui/handle/123456789/359.</u>
- De Master, Kathryn Teigen, and Jess Daniels. "Desert wonderings: reimagining food access mapping." *Agriculture and human values* 36, no. 2 (2019): 241-256. https://doi.org/10.1007/s10460-019-09914-5.
- Epicollect5. n.d. "Ready? Go Ahead and Create Your First Project." Epicollect5 Data Collection User Guide. Accessed November 5, 2021. <u>https://docs.epicollect.net</u>.
- Food and Agriculture Organization, Committee on World Food Security, "World Food Security and World Food Summit Plan of Action." Rome, Italy, November 17, 1996.
- Food and Agriculture Organization of the United Nations. Trade Reforms and Food Security: Conceptualizing the Linkages. Food and Agriculture Organization of the United Nations; Rome, Italy: 2003. p. 313.
- Forum for Food Sovereignty, "Declaration of Nyéléni." Nyéléni Village, Sélingué, Mali, February 23-27, 2007.

- FRED Economic Data. 2020. "SNAP Benefits Recipients in Watauga County, NC." Economic Research. Accessed November 10, 2021. <u>https://fred.stlouisfed.org/series/CBR37189NCA647NCEN</u>
- Goldberg, Eve. *The prison-industrial complex & the global economy*. ReadHowYouWant. com, 2009.
- Harris, L., & Hazen, H. (1). Power of Maps: (Counter) Mapping for Conservation. ACME: An International Journal for Critical Geographies, 4(1), 99-130. Retrieved from <u>https://142.207.145.31/index.php/acme/article/view/730</u>

Holmes, Seth M. Fresh fruit, broken bodies. University of California Press, 2013.

- Hospitality House Northwest North Carolina. n.d. "Our History." Hospitality House. Accessed February 16, 2022. <u>https://www.hosphouse.org/history</u>.
- Hunger and Health Coalition. n.d. "About Us." Hunger and Health Coalition, Our History. Accessed February 16, 2022. <u>https://www.hungerandhealthcoalition.com/about</u>.
- Hunger and Health Coalition. n.d. "Behind the Gated Communities: Hunger in Watauga." Hunger and Health Coalition. Accessed November 16, 2021. www.hungerandhealthcoalition.com/home.
- Kahn, Si. *Creative community organizing: A guide for rabble-rousers, activists, and quiet lovers of justice*. Berrett-Koehler Publishers, 2010.
- Kuljay, Atun, Jean-Marc Louvin, Molly Anderson, Naseegh Jaffer, and Tomaso Ferrando. "From Food as Commodity to Food as Liberation." *Development* 64, no. 3 (2021): 245-251.
- La Via Campesina, "The Right to Produce and Access Land." Rome, Italy, November 11, 1996.
- Llewellyn, T. "The complete guide to hosting a #MapJam in your city." (2016).
- Marek, Elissa Underwood. "The post-incarceration kitchen: Food-based community organizing and employment after imprisonment." *American Studies* 57, no. 3 (2018): 57-79.
- McArthur, Laura Helena, Lanae Ball, Ariel C. Danek, and Donald Holbert. "A high prevalence of food insecurity among university students in Appalachia reflects a need for educational interventions and policy advocacy." *Journal of nutrition education and behavior* 50, no. 6 (2018): 564-572.
- Millar, David, Agnes A. Apusigah, and Claire Boonzaaijer. "Endogenous development in Africa revisited: a systematisation of experiences." (2012).
- Mitlin, Diana, Jhono Bennett, Philipp Horn, Sophie King, Jack Makau And George Masimba

Nyama. "Bridging the Divide Between Academics and Movements" *Social Science Space* (2020),

https://www.socialsciencespace.com/2020/02/bridging-the-divide-between-academics-and-movements/.

- Morrison, Dawn, and Abra Brynne. "Responsibilities and Relationships: Decolonizing the BC Food Systems Network." (2016).
- Musante, Kathleen, and Billie R. DeWalt. *Participant observation: A guide for fieldworkers*. Rowman Altamira, 2010.
- Nicolosi, Emily, Jim French, and Richard Medina. "Add to the map! Evaluating digitally mediated participatory mapping for grassroots sustainabilities." *The Geographical Journal* 186, no. 2 (2020): 142-155. <u>https://doi.org/10.1111/geoj.12315</u>.
- Parlow, A., 1978. The land development rag. In: H.M. Lewis, L. Johnson, and D. Askins, eds. Colonialism in America: the Appalachian case. Boone, North Carolina: The Appalachian Consortium Press, 177-198.
- Parson, Sean. "What dumpstered soup tells us about violence, charity, and politics." In *Cooking up a revolution*. Manchester University Press, 2018.
- Polanyi, Karl, and Robert Morrison MacIver. *The great transformation*. Vol. 2. Boston: Beacon press, 1944.
- Practical, G., 2008. An Introduction to the Basic Concepts of Food Security.
- Ricart, Kate. "Cooking Food Customs in the Pot of Self-Governance: How Food Sovereignty Is a Necessary Ingredient of Tribal Sovereignty." *Am. Indian L. Rev.* 44 (2019): 369.
- Second Harvest Food Bank. 2019. "The Challenge: Hunger in North Carolina." Second Harvest Food Bank of Northwest NC. Accessed November 25, 2021. www.secondharvestnwnc.org/challenge.
- Soma, Tammara, Tamara Shulman, Belinda Li, Janette Bulkan, and Meagan Curtis. "Food assets for whom? Community perspectives on food asset mapping in Canada." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* (2022): 1-18.
- *The Price of Aid* 2004. A Film by Jihan El Tahri, Produced by Dominant 7, Distributed by First Run/Icarus Films. VHS, color, 55 min.
- Todd, Zoe. "Fish, kin and hope: Tending to water violations in Amiskwaciwâskahikan and Treaty Six Territory." *Afterall: A Journal of Art, Context and Enquiry* 43, no. 1 (2017): 102-107.

- Todd's Table. 2022. "Mobilizing the Todd Community." Todd's Table. Accessed Feburary 16, 2022. <u>https://toddstable.org/</u>.
- Trauger, Amy. "Toward a political geography of food sovereignty: transforming territory, exchange and power in the liberal sovereign state." *Journal of Peasant Studies* 41, no. 6 (2014): 1131-1152.
- Trauger, Amy. *We want land to live: making political space for food sovereignty*. Vol. 33. University of Georgia Press, 2017.
- Twitty, Michael W. *The cooking gene: A journey through African American culinary history in the Old South*. HarperCollins, 2017.
- UNFAO "2021 State of Food Security and Nutrition in the World Report and Inbrief." UN
  World Food Programme. UNFAO, 2021.
  https://www.wfp.org/publications/2021-state-food-security-and-nutrition-world-report-an
  d-inbrief.
- United States Census Bureau. 2019. "QuickFacts, Watauga County North Carolina." United States Census Bureau 2019. Accessed November 16, 2021. <u>https://www.census.gov/quickfacts/wataugacountynorthcarolina</u>.
- Wald, Johanna, and Daniel J. Losen. "Defining and redirecting a school-to-prison pipeline." *New directions for youth development* 2003, no. 99 (2003): 9-15.
- Watauga Food Council. n.d. "Hunger Relief." Watauga Food Council. Accessed November 15, 2021. <u>www.wataugafoodcouncil.org/hungerrelief</u>.
- Watauga Food Council. n.d. "Our Mission." Watauga Food Council. Accessed March 1, 2022. http://www.wataugafoodcouncil.org/our-mission.
- Wittman, Hannah, Annette Desmarais, and Nettie Wiebe. "The origins and potential of food sovereignty." *Food sovereignty: Reconnecting food, nature and community* (2010): 1-14.
- Wittman, Hannah. "Food sovereignty: a new rights framework for food and nature?." *Environment and Society* 2, no. 1 (2011): 87-105.
- Wood, Denis, and John Fels. The power of maps. Guilford Press, 1992.
- World Population Review. 2021. "Boone, North Carolina Population 2021." Boone, North Carolina Population 2021 (Demographics, Maps, Graphs). Accessed November 20, 2021. <u>https://worldpopulationreview.com/us-cities/boone-nc-population</u>.

USDA Economic Research Service "Overview." United States Department of Agriculture. USDA, 2022.

https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/