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"Planting Wholesome Seeds": Organic Farming and Community Supported Agriculture at Sweetwater Organic Community Farm

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“Planting Wholesome Seeds”: Organic Farming and Community Supported Agriculture at Sweetwater Organic Community Farm

by

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Abstract

Sweetwater Organic Community Farm is an organic farm and environmental education center located in Tampa, Florida. The farm employs the community supported agriculture (CSA) model, in which members pay a single fee before the growing season begins and receive a weekly or biweekly share of the ongoing harvest in return. Using multiple ethnographic methods, this research aimed to understand the daily operations at Sweetwater as well as the perceptions of staff and CSA members. Findings indicated that there were myriad perceived advantages of organic agriculture but also imposing challenges that needed to be overcome. Moreover, staff members acknowledged the challenges associated with the CSA model such as pleasing and educating members and, for members, having to pick up at designated times and locations. Still, staff members also noted countless benefits, including the opportunity to connect to your food, farmers, environment, and community. In surveys, CSA members indicated that they were overwhelmingly satisfied the CSA model and Sweetwater. Complexities were uncovered that are often overlooked in the literature and merit further exploration. Among these were the pressure on farmers that resulted from receiving payments upfront and the willingness of individuals to become members without understanding the CSA model. There is a need for more studies to longitudinally examine changes in social support, food system knowledge, and eating habits that may occur over the course of the growing season.

Chapter 1: Introduction

Buttressed by the environmental and fair trade movements, among others, organic agriculture has gained in both popularity and production during recent decades (Hess, 2004; Raynolds, 2000; Vilsack, 2012). This emerging alternative specifically has been a response to—and a reaction against—the industrialization of agriculture, that is, to the mounting power of the large corporations (i.e., agribusiness) that often control many different phases of production and that have profit-making, or at least mass production, as their main goal (Grey, 2000). Such corporations rose to prominence in the United States during the mid-twentieth century, when large-scale operations overwhelmed smaller farms (which are often conceived as "family-farms") and relegated them to a marginal, if not non-existent, role in the economy (Grey, 2000). While organic agriculture, which is often linked with smaller undertakings, is unlikely to usurp the influence of conventional agriculture anytime soon, its role is not trivial, and it needs to be better understood.

Following a similar timeline and driven by comparable motivations, community supported agriculture—which is not a set of farming practices but rather a direct-to-consumer marketing scheme that aims to share risk, create community, and propagate knowledge about farming and foods—has also rapidly increased in recognition and prevalence since arriving to the United States in the mid-1980s (Cone & Kakaliouras, 1995; Schnell, 2007; Stanford, 2006). Much like with organic agriculture, community supported agriculture has attracted interest from scholars, but better understandings are

needed. As an in-depth case study of one site (i.e., Sweetwater Organic Community Farm) in Tampa, this research adds to those understandings.

Specifically, the research sought to address five questions:

RQ1: When choosing which foods to buy, what factors do Sweetwater's CSA members give the most priority?

RQ2a: What, from the perspectives of Sweetwater's CSA members, are the benefits of organic farming and foods?

RQ2b: What, from the perspectives of Sweetwater's staff, are the benefits of organic farming and foods?

RQ3a: What, from the perspectives of Sweetwater's CSA members, are the advantages and disadvantages of community supported agriculture?

RQ3b: What, from the perspectives of Sweetwater's staff, are the advantages and disadvantages of community supported agriculture?

RQ4: What, from the perspectives of Sweetwater's staff, are the unique challenges associated with organic farming, as compared with conventional farming, and how do these challenges relate to theoretical conceptions of capitalism and globalization?

RQ5: In what ways, from the perspectives of Sweetwater's staff are organic farming and community supported agriculture (CSA) intertwined, and in what ways are they different?

These questions have been posed, and some answers given, by other authors (Brehm and Eisenhauer, 2008; Campbell and Liepins, 2001; Coombes and Campbell, 1998; Guthman, 2004; Kaltoft, 1999; Torjusen, et al. 2001). However, this study was

exceptional both in terms of its exhaustiveness and its setting (i.e., Tampa, Florida), an area where both organic and community supported agriculture are still in their infancy.

To answer the research questions, I employed three well established methods: (1) participant observation (2) surveys with CSA members; and (3) semi-structured interviews with staff members. The methods are described in greater detail in Chapter 3.

Theoretical Foundations

One major theme that emerges from the social science literature is organic agriculture's resistance, or a lack thereof, to globalization and capitalist enterprises (Campbell and Liepins 2001; Coombes and Campbell 1998; Guthman 2004). Accordingly, political economy—with its focuses on the deleterious effects of unjust policies, globalization, and unbridled profit seeking—is an appropriate theory to draw from for these studies (Erickson & Murphy, 2008; Fine, 1994; Singer & Baer, 1995).

Notably though, organic and community supported agriculture, as forms of alternative agriculture, do not fit neatly into one particular approach. Rather, they are excellent examples of individuals exerting agency and being motivated by non-economic factors (Hendrickson & Hefferman, 2002). For instance, terms such as *food democracy* and *food citizenship* have been coined and refer to the potential of individuals to go beyond viewing food as a commodity and instead to consider the more holistic, societal implications of food choices (Hassanein, 2003; Welsh & MacRae, 1998). This thesis, especially the interviews, adds to the understanding of resistance and motivation. To be clear, political economy does not deny that people have agency; agency just is not emphasized by the theory (Baer, 1997; Singer, 1986).

In addition, numerous public health theories (e.g., the health belief model), while typically applied in more quantitative research, stress the importance of perceived benefits and barriers in shaping behavior (Glanz, Rimer, & Viswanath, 2008; Janz & Becker, 1984). Portions of this research were guided by such theories, as interview questions—and the broader research questions themselves—focused on the advantages of and challenges for organic agriculture and community supported agriculture. These dichotomous focuses were particularly well-suited to the exploratory purposes of the interviews.

Research Setting

The location for the research was Tampa's Sweetwater Organic Community Farm, a nonprofit organization that is considered both an environmental education center and a community-supported urban organic farm (Sweetwater Organic Community Farm, n.d.). The farm is fairly small and yet it is deeply involved in the community, providing volunteer opportunities, workshops, field trip programs, a Sunday market, and even weekly yoga classes, among other offerings. It also employs the community supported agriculture (CSA) model, with members who buy full or half shares in advance and who, in return, receive produce—typically vegetables but also some herbs and flowers—from November to May. For the 2011-2012 growing season, the farm offered 200 shares for an estimated 300 members and their families. Moreover, Sweetwater is certified organic, meeting the federal standards set forth by the National Organic Program (USDA Agricultural Marketing Service, 2008).

To succinctly summarize, Sweetwater was the ideal location for this research because, as an intellectual endeavor, it fit well with two of the farm's primary goals:

community connections and education. Staff members valued transparency and were accustomed to answering questions about the farm.

Overview of Chapters

In Chapter 2, I provide a concise synthesis of the literature pertaining to organic and community supported agriculture. Given that the impacts of food production and distribution are so far-reaching and insidious, the review should not be considered comprehensive; rather, it is concise and focuses on the topics most directly related to this research.

Next, in Chapter 3, I expound upon the three methods that were utilized, describing the data collection and analysis as well as the construction of the survey and interview guide. The purposes of the participant observation are also explicated.

The results of the staff interviews, CSA member surveys, and participant observation are presented in Chapter 4. Numerous quotations are included because staff members, having devoted countless hours to organic farming and community supported agriculture, were the experts, and their insights were unique. Then, frequencies derived from the member surveys are provided. The results of chi-square tests (i.e., statistical comparisons of particular groups) are only mentioned because none of the results remained significant after statistical corrections (see Appendix A). Finally, I highlight the importance of the participant observation and briefly discuss the experiences I believed to be most meaningful.

Lastly, the discussion in Chapter 5 is split into five subsections. First, I compare the research results with previous findings from the literature. Then, I revisit and elaborate upon the previous discussion of theory and affirm the value of the social ecological model (SEM) and social cognitive theory (SCT) in interpreting the results (Bandura, 2004; McLeroy, Bibeau, Steckler, & Glanz, 1988). Next, I suggest specific directions for future research,

including conducting more longitudinal studies and focusing on critical but relatively unexplored questions. Fourth, the most notable limitations are identified. Finally, I stress the most crucial conclusions from the research. While the perceptions of both CSA members and staff were consistent with previous studies, their insights underscored the need to better understand the complexities of both organic and community supported agriculture and to elicit additional insights from the stakeholders themselves.

Chapter 2: Literature Review

Organic Agriculture

Although there is no universally accepted definition of *organic*, according to the Unites States Department of Agriculture (USDA) website, *organic food* can be defined as the following:

> Organic food is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; or ionizing radiation. (USDA Agricultural Marketing Service, 2010)

In addition to criteria in the preceding definition, organic foods—as defined by the US federal government—cannot be or contain genetically modified organisms (GMOs) (National Archives and Records Administration, 2012). According to one source, "Combining genes from different organisms is known as recombinant DNA technology, and the resulting organism is said to be 'genetically modified', 'genetically engineered', or 'transgenic'" (U.S. Department of Energy Genome Program, 2012).

The USDA operates the National Organic Program, which was established by the *Organic Foods Production Act of 1990* and has numerous responsibilities (USDA

Agricultural Marketing Service, 2008). Among these are helping to develop and amend organic standards, overseeing organic accreditors and facilitating the accreditation process (e.g., through training and cost sharing programs), and continually revising the National List of Allowed and Prohibited Substances (USDA Agricultural Marketing Service, 2012). The particular legal requirements for certification and the aforementioned list—whether viewed as satisfactory or not—are too extensive to detail here but can be read elsewhere (National Archives and Records Administration, 2012). Suffice it to state that the USDA is ostensibly attempting to promote organic and alternative agriculture (Vilsack, 2012); whether or not these efforts are adequate and are resulting in the proliferation of a truly sustainable form of food production in the United States is open to debate (Guthman 2004).

On the business side, organic agriculture is rising in popularity. As described in a report from the US Secretary of Agriculture:

> The retail value of the organic industry grew almost 9.5% in 2011 to $31.4 billion. Organic foods continue to gain market share in the food industry, climbing to 4.2% of U.S. retail food sales in 2010. And [the USDA] is creating opportunities for farmers and ranchers: the number of operations certified organic grew by 1,109 – or more than 6% – between 2009 and 2011. (Vilsack, 2012)

Thus, while organic food is still relegated to a minor role in the US economy, its influence is growing, as people—regardless of the reasons—increasingly opt for items labeled as *organic*.

Other views of *organic,* sustainability, and alternative agriculture.

Recognizing that legal definitions are neither sufficient nor pleasing for everyone, multiple scholars have examined the varied perceptions of organic, sustainable, and alternative agriculture and concluded that the three were characterized not only by the absence of particular chemicals but rather by particular environmental, economic, ethical, social, and health-related qualities (Beus & Dunlap, 1990; Chiappe & Butler Flora, 1998; Kloppenburg, Lezburg, De Master, Stevenson, & Hendrickson, 2000). For example, Kloppenburg and colleagues (2000) conducted a free-listing activity with 125 attendees of a food conference and discovered that an open exchange of information, an appreciation for seasonality, an environment that encourages participation, and a system centered on local production and distribution were among the fourteen reported properties of a *sustainable food system*, a term that is similar to *organic agriculture* in that the focus, ideally, is on the holistic, long-term well-being of organisms and the environment. In other words, there were perceived attributes of place, culture, and sociality that were missing from the national organic standards (Kloppenburg et al., 2000; National Archives and Records Administration, 2012).

Regarding the term *organic* specifically, Chrzan (2010) employed participant observation and key informant interviews and summarized the diverse views of the word. Farmers perceived organic farming to be multidimensional and marked by degrees. Farms were not simply certified organic or not; instead, practices were perceived to fall along a continuum of organic and, if at all possible, to involve and impact the community in a positive manner (Chrzan, 2010). Moreover, farmers thought that large-scale organic

producers were less likely to uphold all of the principles of organic than local, small-scale organic farmers—whether certified or not.

Similarly, DeLind (2000) reviewed the mixed responses to the development of the aforementioned certification standards. While many organic proponents recognized the economic utility of defining the term, there was also a prevailing belief that organic agriculture was meant to be holistic and could not be easily bound by a narrow set of rules. As DeLind herself wrote regarding the standards:

> It is a faux "greenness" (and thus a faux organic) that is defined solely on technical merit and not social spirit. Organic has little hope of succeeding in any meaningful way if its definition is not also predicated on putting more people back on the land, creating useful work that produces a just income along with good food, redistributing wealth and production resources, and encouraging people to think and act collectively in the interest of their own long-term development. (DeLind, 2000:204)

To summarize, despite the USDA's purported commitment to enhance the profile of organic agriculture, the organic standards, as currently constituted, are not accepted unanimously by farmers and advocates, as they do not require growers to adhere to ideals of community, justice, education, localness, and so forth (Beus & Dunlap, 1990; Chiappe & Butler Flora, 1998; Chrzan, 2010; DeLind, 2000; Kloppenburg et al., 2000; National Archives and Records Administration, 2012; Vilsack, 2012).

Power and position of organic agriculture. One recurring topic in the social science literature is organic agriculture's resistance, or a lack thereof, to globalization and conventional agriculture—that is, to the large corporations that have profit-seeking as

their primary objective (Best, 2008; Buck, Getz, & Guthman, 1997; Campbell & Liepins, 2001; Constance, Choi, & Lyke-Ho-Gland, 2008; Coombes & Campbell, 1998; Guthman, 2004). The concept of *conventionalization* was coined by Buck and colleagues (1997) and referred to the rising tendency—particularly in California—of organic agriculture to mirror conventional production, most specifically in terms of scale, distribution, the lack of crop diversity, and the involvement of third parties (e.g., to acquire inputs) (Buck et al., 1997). *Bifurcation*, a related term, describes the dual nature of organic farms, with some being large-scale, specialized entities and others being small, diversified operations (Buck et al., 1997; Constance et al., 2008).

While the debate over whether organic agriculture will eventually be conventionalized or will both thrive economically and remain loyal to its original tenets remains unsettled, it is clear that there are complexities and locational differences. Researchers, for example, have presented a more optimistic outlook for organic agriculture in New Zealand and Australia than for organic production in California (Buck et al., 1997; Campbell & Liepins, 2001; Coombes & Campbell, 1998; Guthman, 2004; Lockie & Halpin, 2005; Rosin & Campbell, 2009). Moreover, Buck and collaborators (1997) pointed to four distinct advantages of organic agriculture: (1) the ability to produce and care for specialty crops as well as to minimize the need for inputs and technology; (2) the capacity for smaller organic operations to survive and exploit economic niches; (3) the primary, shared concerns for the environment, health, and the community rather than for profits; and (4) the consumer demand for foods that are produced locally and sustainably.

In short, although the narrowly defined standards—focused principally on the absence of synthetic chemicals—have enabled large corporations to exploit the consumer demand for organic agriculture while, at the same time, not being committed to the ideals of the movement, the future prospects of organic production are not clearly grim (Buck et al., 1997; DeLind, 2000; Guthman, 2004; National Archives and Records Administration, 2012). Going forward, as the retail sales of foods labeled as organic continue to climb, the impetus will be on consumers, policymakers, and farmers to ensure that the foods being exchanged are not just mirages of health and sustainability (Vilsack, 2012).

Farmers' motivations for adopting organic practices. Concerns for the environment, personal health, and profits seem, to varying degrees, to be the main determining and distinguishing factors for organic farmers (Best, 2010; Darnhofer, Schneeberger, & Freyer, 2005; Fairweather, 1999; Läpple & Rensburg, 2011; Lockie & Halpin, 2005; Padel, 2001; Rezvanfar, Eraktan, & Olhan, 2011). The results of a nationwide survey of farmers in Ireland indicated that early adopters of organic farming practices were less motivated by money than late adopters and conventional farmers were (Läpple & Rensburg, 2011). Moreover, as supported by other studies, organic farmers were more conscious of environmental impacts (Best, 2010; Läpple & Rensburg, 2011; Lockie & Halpin, 2005).

Based on interviews with farmers in New Zealand, Fairweather (1999) identified two types of organic farmers: *Committed Organic* and *Pragmatic Organic*. The former category consisted of farmers who possessed motivations unrelated to profits (e.g., absence of chemicals); the latter group, as the name implies, included individuals who were farming organically for economic, rather than ideological, reasons (Fairweather,

1999). Hence, there appears to be multiple factors that influence the ways that people choose to farm (Fairweather, 1999; Darnhofer et al., 2005).

Consumers' motivations for choosing organic foods. According to two separate reviews of the literature, concerns for personal health comprise the principal reason that consumers purchase organic foods (Hughner, McDonagh, Prothero, Shultz, & Stanton, 2007; Shepherd, Magnusson, & Sjödén, 2005). In one study, the discrepancy between health-related motivations and environmental motivations were most glaring for infrequent organic buyers, as less than half of such individuals were eco-conscious (Schifferstein & Oude Ophuis, 1998). Similarly, a study in Sweden concluded that perceived benefits to health was the best predictor of purchasing organic food (Magnusson, Arvola, Hursti, Åberg, & Sjödén, 2003).

Still, while usually secondary, environmental concerns and perceived tastiness among other factors, have been found to be common and influential among organic buyers (Hughner et al., 2007; Magnusson, Arvola, Hursti, Åberg, & Sjödén, 2001; Makatouni, 2002; Roddy, Cowan, & Hutchinson, 1994; Schifferstein & Oude Ophuis, 1998; Torjusen, Lieblein, Wandel, & Francis, 2001; Wandel & Bugge, 1997). For instance, Torjusen and colleagues (2001) surveyed purchasers of organic foods and discovered that *taste* and *freshness* were the two qualities considered most important; *environmentally sound production* and *ethical and political considerations*, though far down on the list, were deemed either *very important* or *rather important* by more than half of the participants (Torjusen et al., 2001:211).

Conversely, purchasing price, availability, and convenience are among the reported obstacles to buying organic foods (Hughner et al., 2007; Lockie, Lyons,

Lawrence, & Mummery, 2002; Magnusson et al., 2001; Roddy et al., 1994; Tregear, Dent, & McGregor, 1994; Zanoli & Naspetti, 2002). Hence, consumers weigh both the benefits and barriers.

Agriculture and the environment. In general, research regarding the relationship between farming practices and their effects on ecology has yielded results in favor of organic agriculture (Bengtsson, Ahnström, & Weibull, 2005); however, the outcomes vary across studies and seem to be influenced by the landscape and the species being assessed (Bengtsson et al., 2005; Fuller et al., 2005; Gabriel et al., 2010). According to one meta-analysis, organic agriculture displayed adverse effects on ecology in 16% of studies—a small but notable minority (Bengtsson et al., 2005).

Nevertheless, to reiterate, the benefits of organic agriculture to the environment appear to be real and not imagined. The majority of studies support the beneficial impacts of organic agriculture on bees, butterflies, and birds, as well as on plants and flowers (Bengtsson et al., 2005; Feber, Firbank, Johnson, & Macdonald, 1997; Gabriel & Tscharntke, 2007; Holzschuh, Steffan-Dewenter, Kleijn, & Tscharntke, 2007; Holzschuh, Steffan-Dewenter, & Tscharntke, 2008; Rundlöf, Bengtsson, & Smith, 2008; Rundlöf, Nilsson, & Smith, 2008). Furthermore, organically farmed soils may possess greater microbial biomass and species diversity (Gunapala & Scow, 1998; Mäder et al., 2002). Finally, organic agriculture requires fewer inputs and may be more energy efficient (e.g., reduced emission of greenhouse gases), particularly when off-farm usage is taken into account (Mäder et al., 2002; Wood, Lenzen, Dey, & Lundie, 2006).

Perhaps relatedly, pesticides such as neonicotinoids and malathion have been suggested to cause significant harm to bee and frog populations (Henry et al., 2012;

Relyea & Diecks, 2008; Relyea, 2004; Whitehorn, O'Connor, Wackers, & Goulson, 2012). In addition, a large-scale study in Europe found that the utilization of synthetic chemicals had deleterious consequences for birds, carabids (i.e., beetles), and wild plants (Geiger et al., 2010).

Crops yields of organic farming. The debate about whether or not the crop yields from organic agriculture are comparable to conventional agriculture and capable of "feeding the world" is ongoing, and the details are beyond the scope of this literature review. Some scholars argue that, with the aid of leguminous cover crops, organic agriculture can simultaneously feed everyone and heal the environment (Badgley et al., 2007). Others, by contrast, assert that cover cropping to that extent would necessitate a significant use of space, which, in turn, would result in dangerously low yields (Connor, 2008).

What is clear is that organic farming practices fluctuate, and, consequently, the yields produced vary as well. According to a recent meta-analysis, crop yields from organic farming suffer when practices closely resemble those of conventional farming (Seufert, Ramankutty, & Foley, 2012); however, with certain conditions and with the proper organic methods, the crops yields of conventional farming are only slightly better than of organic farming. Thus, while this meta-analysis should not be considered the end-all of the question, it does highlight the need to consider contextual differences and view organic agriculture as heterogeneous (Seufert et al., 2012).

Organic foods and nutrition. Another unsettled topic pertains to health: Are organic foods more nutritious than conventional foods? The research has been fraught with methodological problems and, perhaps as a consequence, has produced inconclusive

and sometimes contradictory results (Dangour et al., 2010; Williams, 2002; Smith-Spangler et al., 2012; Zhao, Rajashekar, Carey, & Wang, 2006).

On the affirmative side, associations have been found between organic production and greater amounts of the following: vitamin C, carotenoids, and polyphenol content in fresh and pureed tomatoes (Caris-Veyrat et al., 2004); polyphenol content and resveratrol in grape juice (Dani et al., 2007); quercetin and kaempferol in the urine from an organic diet (Grinder-Pederson et al., 2003); rumenic acid in breast milk (Rist et al., 2007); phytochemical content, antioxidant activity, and *in vitro* bioactivity from red oranges (Tarozzi et al., 2006); and phytochemical content and antioxidant activity, among others, from blueberries (Wang, Chen, Sciarappa, Wang, & Camp, 2008). Moreover, in one study, the infants of mothers who consumed organic dairy products were less likely to experience eczema at two-year follow up (Kummeling et al., 2008).

However, on the negative side, studies have failed to discover statistically significant relationships between organic and conventionally grown foods in the following instances: polyphenol content or antioxidant activity for apples (Briviba et al., 2007; Stracke et al., 2010b; Valavanadis, Vlachogianni, Psomas, Zovoili, & Siatis, 2009); total phenolics, antioxidant activity, β-carotene, lycopene, or ascorbic acid for two varieties of tomatoes (Jurosek, Lumpkin, Yang, Ledesma, & Ma, 2009); and carotenoid contents or antioxidant activity in carrots (Stracke et al., 2010a). The outcomes of other studies have been mixed (Chassy, Bui, Renaud, Van Horn, & Mitchell, 2006; Lombardi-Boccia, Lucarini, Lanzi, Aguzzi, & Cappelloni, 2004; Smith-Spangler et al., 2012).

In short, the body of scientific evidence is not overwhelming in one direction or the other. Due to variations in methods used and, perhaps, foods examined, study outcomes have been conflicting.

Health effects of synthetic chemicals. Although the nutritional benefits of organic foods are debatable, there is little doubt that the synthetic chemicals used in conventional agriculture can have damaging effects, particularly for farmworkers and their families. Pesticides have been detected not only in the homes of farmworkers—often brought in on shoes and clothing—but also in urine samples from children (Arcury et al., 2007; Arcury, Grzywacz, Davis, Barr, & Quandt, 2006; Arcury et al., 2005; Bradman et al., 2006; Curwin et al., 2005).

While there is chemical- and disease- based variation, certain pesticides have been associated with increased risk for lung cancer, prostate cancer, and pancreatic cancer among farmworkers (Alavanja et al., 2004; Alavanja et al., 2003; Andreotti et al., 2009; Clary & Ritz, 2003). Moreover, deleterious neurobehavioral effects have been documented (Farahat et al., 2003; Fiedler, Kipen, Kelly-McNeil, & Fenske, 1997; Rothlein et al., 2006). Therefore, organic farming—which proscribes the use of such chemicals—likely is safer for the laborers in the fields than conventional farming is.

Community Supported Agriculture

Community Supported Agriculture—which originated in Japan and then expanded to Europe and, eventually, to the United States—is an agricultural scheme in which the consumers (known as members or shareholders) typically pay a single but substantial fee in advance, and, in return, they receive a share of fresh produce throughout the growing season (Cone & Kakaliouras, 1995; Schnell, 2007; Stanford,

2006). CSAs also aim, whether primarily or secondarily, to build community and to impart knowledge about farming and sustainability (Cone & Kakaliouras, 1995; Schnell, 2007; Stanford, 2006). As this unique form of agriculture has increasingly attracted followers, researchers from myriad disciplines have sought to understand CSA's diverse forms and applications, its strengths and limitations, and its members' and farmers' motivations, demographics, behaviors, experiences, and expectations. In the succeeding sections, I synthesize the results of such research.

Diverse forms and applications of CSA. While there are important commonalities among CSAs—for example, essentially all CSAs are local organizations, with the vast majority growing organic food—there are also possible differences that warrant mention (Galt, O'Sullivan, Beckett, & Hiner, 2012; Oberholtzer, 2004; Lass, Stevenson, Hendrickson, & Ruhf, 2003; Woods, Ernst, Ernst, & Wright, 2009; Schnell, 2007). First, some CSAs are non-profit organizations and others are for-profit enterprises (Galt et al., 2012; Oberholtzer, 2004; Lass et al., 2003; Perez, Allen, & Brown, 2004; Woods et al., 2009). This does not mean that for-profit CSAs do not care about community or that they are financially lucrative; it just means that their for-profit status may hinder certain community-related activities (Galt et al., 2012; Oberholtzer, 2004; Lass et al., 2003; Perez et al., 2004; Woods et al., 2009). Moreover, although most (but not all) CSA farms are relatively small, the number of members can vary greatly (Galt et al., 2012; Oberholtzer, 2004; Lass et al., 2003; Perez et al., 2004; Woods et al., 2009). For instance, in a study of five CSAs, the number ranged from 14 to 250 (Lang, 2005). In addition, the majority of US CSAs are located in or near populous urban and sub-suburban areas, but there are exceptions, including several in Iowa (Schnell, 2007; Stagl,

2002; Wells, Gradwell, & Yoder, 1999; Wells & Gradwell, 2001). Yet the most important differences probably are not geographic or size-related; rather, they are operational differences, pertaining to the terms of membership, the offered payment plans, organic certification status, the logistics of food distribution (or pick-up), the scope of community activities, and the ways that CSAs supplement their income (Cone & Myhre, 2000; Galt et al., 2012; Lang, 2005; Oberholtzer, 2004; Lass et al., 2003; Perez et al., 2004; Woods et al., 2009; Wells et al., 1999). The details of this operational diversity, however, are beyond the scope of this review.

Strengths of CSA. If and when the agricultural scheme is implemented successfully, CSA can lead to a symbiotic relationship, in which both the consumers and farmers benefit. For the purposes of this review, five strengths of CSA are briefly highlighted: (1) the minimized risks and increased assistance for farmers, (2) the improved quality of foods, (3) the potential for greater social awareness and concern, (4) the capability of positively impacting local causes (e.g., food banks), and (5) the increases in produce consumption that may result from being a CSA member.

First, CSA can provide financial security and added labor for local farmers. By buying shares in advance of the growing season, consumers consent—however tentatively—to receiving an abundance of produce when conditions are excellent and a lack of produce when conditions are poor (Cone & Myhre, 2000). Notably, this risk-sharing does not necessarily bring about massive profits for farmers and unfavorable deals for CSA members; on the contrary, farming remains a financially precarious endeavor, and, according to Cooley and Lass (1988) members receive a lower price than they would otherwise receive in local, regional, or national stores (Cone & Myhre, 2000;

Perez et al., 2004; Stagl, 2002). Risk-sharing simply supplies farmers with a buffer, if only a weak one, against unpredictable troubles (Perez et al., 2004).

Risk-sharing is not the only benefit reaped by farmers; they also, under the best of circumstances, are rewarded by labor from volunteers and CSA members. Such work often extends beyond the field and into areas such as writing, transporting, and recruiting (Cone and Myhre, 2000). Importantly, however, the work is not always free, nor is it always guaranteed. Certain CSAs reduce share prices for those who work a certain number of hours; some desire participation from CSA members but discover that this desire is not shared by everyone (DeLind, 1999; Farnsworth et al., 1996); and others do not expect much participation at all (Schnell, 2007). Nevertheless, while sometimes untapped, CSA members' labor can be an invaluable resource.

The second strength of CSA lies in its ability to provide fresh, high-quality, often chemical-free food directly from a known and trusted source—that is, the CSA farm (Cooley & Lass, 1998; Durrenberger, 2002). Because the food produced by CSAs is typically either picked up at designated locations or delivered locally, the food remains fresh and is not subjected to long-distance transport or "food miles" (Cox et al., 2008; Macias, 2008; Stagl, 2002). The reduced transportation has advantages not only related to the environment (e.g., through lower energy usage), costs, and freshness (Stagl, 2002; Macias, 2008); it also allows for the production of crops that would not be planted otherwise (Stagl, 2002).

Thirdly, community supported agriculture, with its emphases on education and community, can transform its members and shift motivations from immediate, individual (and family) level concerns (e.g., freshness) to broader, societal level concerns (Cone and

Myhre, 2000; Cox et al., 2008; Polimeni, Polimeni, Shirey, Trees, & Trees, 2011 Russell & Zepeda, 2008; Schnell, 2007). For example, members of one Scottish CSA cited newfound thoughts and behaviors regarding the soil, the water supply, fish, horses, cooking, and appropriate shopping habits (Cox et al., 2008). While it would be naïve and inaccurate to suggest that such changes are the norm, neither are they exceptionally rare.

Next, although CSA has been criticized for attracting primarily middle- and high-income households, CSA schemes are well-suited to tackling local issues of impoverishment (Guthman, Morris, & Allen, 2006; Lass et al., 2003; Perez et al., 2004; Wells et al., 1999; Woods et al., 2009). For instance, members of one CSA in Iowa established the Field to Family (FTF) Community Food Project, for which the CSA partners with local churches and agencies to provide fresh foods and various opportunities for low-income individuals (Wells et al., 1999). The project also expanded to include—among other forms of assistance—menu development for Iowan restaurants and other eating locations (Wells et al., 1999). Similarly, Jan Perez and colleagues (2004) write of the steps taken by Californian CSAs to expand access to their foods. More specifically, half (i.e., six) of the CSAs in the sample offered, either currently or previously, cheaper shares to certain individuals; a third (i.e., four) of the CSAs donated excess food. In a separate study, over 60% of participating CSAs in California gave away such food (Guthman et al., 2006); gleaning fields and raising money for low-income people were strategies employed, respectively, by 22.2% and 30.6% of CSAs (Guthman et al., 2006). Thus, as these examples illustrate, CSAs, as growers of food and partners in the community, can make a difference—if only a modest one and if only under ideal circumstances—in the lives of families and individuals.

Notably, Andreatta, Rhyne, and Dery (2008) used grant money and the assistance of volunteers to subsidize CSA shares for 39 low-income families and to distribute the produce to accessible locations in North Carolina. While almost half (44%) of the benefiting households did not participate in interviews after the season, those who were interviewed reported positive experiences, and some noted changes in cooking, purchasing, and eating behaviors (Andreatta et al., 2008). Though just one study, results indicated that—with barriers accounted for—the CSA model was a viable option for providing food assistance. However, since the project was grant- and volunteer-supported, the long-term sustainability was questionable (Andreatta et al., 2008). More innovative strategies are needed to enable larger numbers of low-income families to become members of CSAs rather than merely receive surplus food from them.

The final strength discussed here should be regarded with caution, as there is a dearth of rigorous studies. Nonetheless, some research suggests that CSA membership is associated with the consumption of greater amounts of fruits and vegetables (Andreatta et al., 2008; Cohen, Gearhart, & Garland, 2012; Landis et al., 2010; MacMillen, Uribe, Winham, & Wharton, 2012; Oberholtzer, 2004; Russell & Zepeda, 2008). The directionality and magnitude of this relationship are uncertain and require further investigation.

Weaknesses of and barriers to CSA. The strengths of community supported agriculture—particularly when it is implemented most successfully—are remarkable. Nevertheless, it would be amiss to identify the strengths without also describing the limitations. In this section, four weaknesses among many receive special attention: (1) challenges are posed by the diverse skill set that successfully managing a CSA requires;

(2) CSA locations and members' demographics are less than ideal; (3) there can be a disconnect between members' and farmers' expectations and priorities, particularly those regarding community and participation; and (4) the seasonal (i.e., not year-round) availability of CSA shares forces individuals to visit other non-CSA food suppliers. After discussing these limitations, several others are identified but not explicated.

To begin, multiple authors—drawing from interviews with farmers—have noted the difficulties associated with running CSAs (Perez et al., 2004; Stanford, 2006). To quote Jan Perez et al., the staff at CSAs must "wear more than one hat" and oversee not only the farming but also the recruiting, the community activities, and so forth (Perez et al., 2004:3). When staff members are unskilled at one or all of the tasks, problems and inefficiencies can emerge, especially during the first years of operation (Perez et al., 2004; Stanford, 2006). In short, staff members must learn and adapt, or else succumb to failure (Stanford, 2006).

Secondly, even though they can make positive contributions to communities, CSAs tend to attract and be located near affluent households (Schnell, 2007). As countless authors have documented, CSA members—and even the farmers themselves—are usually well-educated (Cone & Kakaliouras, 1995; DeLind & Ferguson, 1999; Durrenberger, 2002; Oberholtzer, 2004). A disproportionately high number of CSA members also seem to be white (DeLind & Ferguson, 1999; Durrenberger, 2002; Oberholtzer, 2004). If CSAs are to truly expand and become influential, they must increase their accessibility and appeal to a wider range of people.

Moreover, under less than ideal circumstances, community supported agriculture schemes can ironically lack the sense of community. As multiple studies have found,

building community is often far down of CSA members' lists of priorities, and many do not show interest in volunteering or in attending events (Cone & Kakaliouras, 1995; Cone & Myhre, 2000; DeLind, 1999; Durrenberger, 2002; Farnsworth, 1996; Landis et al., 2010; Oberholtzer, 2004; Polimeni et al., 2011). When farmers expect—for both practical and ideological reasons—CSA members to occasionally volunteer, disappointment and frustration can ultimately result (DeLind, 1999).

Fourth, while there are exceptions, the vast majority of CSAs only offer shares during the growing season and not year-round (Cox et al., 2008; Stagl, 2002). As a result, even ardent CSA members must shop elsewhere during the offseason and buy lower-quality foods. Stated simply, most CSAs are limited because they cannot be the sole source of food for individuals.

Before proceeding to the next section, there remain three limitations that deserve passing mention. They are the following: (1) the inability of CSA members to select their food items may be viewed as problematic (Cooley & Lass, 1998; Durrenberger, 2002; Goland, 2002; Lea et al., 2006); (2) pick-up times and locations can be inconvenient (Cooley & Lass, 1998; Oberholtzer, 2004); and (3) preparing meals using fresh, organic foods may be too demanding (e.g., time-consuming) for some individuals (Cooley & Lass 1998; Goland 2002).

Additional information about demographics and motivations. Many demographic characteristics of CSA members and farmers (e.g., well-educated, middle- and upper-income) have already been discussed. Still, three important points have yet to be made, including one regarding members' motivations.

First, for unclear reasons, women seem to partake, and initiate household membership, in community supported agriculture more often than men do (Cone & Myhre, 2000; DeLind & Ferguson, 1999; Wells & Gradwell, 2001). In one study of CSA members, men attributed women's disproportionate involvement to perceived predispositions toward nurturing and socializing (DeLind & Ferguson, 1999). In contrast, women preferred to link their participation to socially ascribed roles (e.g., housewife, mother). Similarly, Jarosz (2011) concluded that female interviewees possessed a penchant for caring that manifested itself through participation in CSAs (Jarosz, 2011). Still, despite the apparent disparities—as well as the sizable proportion of females operating CSAs, as compared to other types of farms—there still are similar numbers of males and females who are CSA farmers (Galt et al., 2012; Oberholtzer, 2004; Lass et al., 2003; USDA National Agricultural Statistics Service, 2007). Therefore, community supported agriculture should not be considered an exclusively feminine enterprise.

In terms of motivations, CSA members—like other purchasers of organic foods—consistently rate health and freshness as high priorities, with the well-being of the environment deemed only slightly less important (Curtis, 2011; Farr-Wharton, Lyle, Choi, & Foth, 2012; Landis et al., 2010; Oberholtzer, 2004; Polimeni et al., 2011). Interestingly, multiple studies have found supporting local farmers to be a primary motivation among CSA members (Curtis, 2011; Landis et al., 2010; Oberholtzer, 2004; Polimeni et al., 2011).

The third and most important point is this: Farmers' and members' motivations and concerns—whether similar or divergent—are not principally financial; this has been affirmed by numerous studies and authors (Cone & Kakaliouras, 1995; Curtis, 2011;

DeLind & Ferguson, 1999; Durrenberger, 2002; Farnsworth et al., 1996; Oberholtzer, 2004; Polimeni, 2011; Wells & Gradwell, 2000). Given the relative affluence of most CSA members, such motivations (or lack thereof) are not completely surprising. Nevertheless, it seems that, contrary to some theoretical conceptions of capitalism, people are not always driven by profits. In fact, CSA may pose resistance, however strong, to commodification and large corporations (Cone and Myhre, 2000). This theme from the literature—as well as many of the others previously discussed—was addressed by my research, the methods of which are described next.

Chapter 3: Methods

For this research, I utilized a mixed-methods approach designed to answer the five research questions and to acquire an understanding of the daily operations of Sweetwater. Specifically, I employed three methods: semi-structured, in-depth interviews with staff members (n = 7) at varying levels of involvement; brief questionnaires completed by CSA members (n = 53); and participant observation, with written notes covering about 200 hours of time in the field. Below, I detail the three methods in turn.

Semi-Structured Interviews

Between August 2011 and May 2012, I conducted and audio recorded in-person interviews with seven staff members, including one intern. Two interviewees were female, and five were male. Convenience sampling was used, but the majority of staff members were given the opportunity to participate. Interns (who are treated as staff at the farm) and regular volunteers fit the eligibility criteria, but most were not asked and did not participate, usually for practical reasons (e.g., too difficult to draw people away from farm activities). The mean duration of the interviews was 57 minutes; the shortest interview was 43.35 minutes, and the longest was 78.32 minutes. Financial incentives were not provided, and, thus, staff members participated out of their own generosity and perhaps interest in the research.

The interview guide was based on the four broad research questions pertinent to staff members. The topics covered the benefits of organic agriculture (research question

2), the advantages and disadvantages of community supported agriculture (research question 3), the interrelationships between organic agriculture and community supported agriculture (research question 5), and the unique challenges facing organic farming (research question 4) (Table 3.1). My questions were also informed by theory, existing literature, and my own experiences at the farm. Following multiple social science theories, barriers and benefits were major focuses, as were political and economic considerations (Erickson & Murphy, 2008; Fine, 1994; Glanz et al., 2008; Janz & Becker, 1984; Singer & Baer, 1995). The twenty-three specific questions on the guide were asked—albeit sometimes in combination or out of order—during all of the interviews, but various follow-up questions were posed when deemed appropriate.

In the analysis phase, I transcribed the interviews and coded them with NVivo 9. The codebook was created through an inductive process of multiple readings and was intended to be comprehensive. However, since I was the only coder, it should be noted that the purpose of coding was not to quantitatively assess inter-rater reliability or the breadth of discussion about a particular topic but rather to help organize and allow for a fair and complete presentation of the data—that is to perform basic content analysis. My personal involvement with every research activity also aided in pulling out key themes and representative quotations.

Given the small sample size, data saturation almost certainly was not reached. Nevertheless, as an exploratory study conducted at one research site, the perceptions shared by participants should be considered valuable in and of themselves and could also guide future studies.

Table 3.1

Interview Guide Questions

1. To ensure that your use of the term is well-understood, let me begin by asking this question: How do you personally define the term 'organic', particularly with regard to farming practices and foods?
RQ2b: *What, from the perspectives of Sweetwater's staff, are the benefits of organic farming and foods?*
2. What, in general terms, motivated you to come to Sweetwater? In other words, what led you to come to a certified organic community supported farm? Please do not feel like you need to provide many personal details.
3. Would you ever consider working for or volunteering at a conventional, non-organic farm? Why or why not?
4. Should organic farming practices be preferred over other, non-organic farming practices? Why or why not?
5. Similarly, should organic foods be preferred over other, non-organic foods? Why or why not?
6. How much influence do you think health considerations have when people and organizations decide whether to use organic or conventional farming practices? How much influence should health considerations have?
7. How much influence do you think health considerations have when people decide whether they should eat organic or non-organic foods? How much influence should health considerations have?
RQ5: *In what ways, from the perspective of Sweetwater's staff, are organic farming and community supported agriculture (CSA) intertwined, and in what ways are they different?*
8. Approximately what proportion of CSAs use organic farming practices? Why do you think this is the case?
9. Do some organic farms decide against the community supported agriculture model? Why or why not?
10. Are there other effective marketing strategies (besides CSA) that organic farms, including Sweetwater, can and/or do use? (Can you briefly describe the benefits of such strategies?)
RQ3b: *What, from the perspectives of Sweetwater's staff, are the advantages and disadvantages of community supported agriculture?*
11. Are there any advantages for farmers associated with the community supported agriculture model? (What are they?)
12. Are there any advantages or unique challenges for farmers associated with the community supported agriculture model? (What are they?)
13. From your point of view, are there any benefits associated with, or positive aspects of, being a member of a CSA?

14. From your point of view, are there any negative aspects of, or challenges associated with, being a member of a CSA?

15. Would you recommend that all people become members of a CSA? In other words, is community supported agriculture appropriate for everyone? (Should it be?)

RQ4: *What, from the perspectives of Sweetwater's staff, are the unique challenges associated with organic farming, as compared with conventional farming, and how do these challenges relate to theoretical conceptions of capitalism and globalization?*

16. How do the crop yields from organic farming compare with the crop yields from conventional farming? (Would it be possible to feed the world with only organic farms?)

17. From a purely economic standpoint, do farms reap any benefits by choosing organic practices?

18. Conversely, do organic farms face any unique economic obstacles?

19. Are there any agricultural policies that exclusively benefit organic farms? (Should there be such policies? Why or why not?)

20. How would you respond to those people who say that organic foods cost too much or that organic farming and foods are for 'elitists'?

21. Are there steps that can and should be taken to make organic foods more accessible to more individuals? Has Sweetwater specifically taken steps to make its food more accessible?

22. In a perfect world, what would agriculture in the U.S. (or the world, more generally) look like? For example, should all farms use organic practices? Should all foods be grown and distributed locally?

23. Ten years from now, what do you believe the state of food and agriculture in the United States will be? Will organic agriculture be more prevalent? Will there be more CSAs, with more members? (Why or why not?)

Closing Questions

24. Do you have any additional comments about organic agriculture AND/OR community-supported agriculture?

25. Do you have any additional comments about Sweetwater Farm in particular? Feel free to share any information or opinions you would like.

CSA Member Surveys

Fifty-three surveys were completed anonymously by CSA members. The questions related to consumer preferences (research question 1), organic agriculture

(research question 2), and community supported agriculture (research question 3) (Figure 3.1). The survey development was informed by Torjusen et al.'s (2001) research, mainly in that it focused on specific aspects of foods. In order to minimize respondent burden and enable participants to complete the survey quickly, I limited the response options to three or four discrete choices.

Administration. The surveys were administered two different ways. First, 28 people participated in person. After sending out a message through the online newsletter, a recruitment table was set up during the CSA pick-up times on Thursday, January 5, 2012 and on Sunday, January 8, 2012 (i.e., about two months into the growing season). Interested members were given consent and study information, and if they agreed to participate, they completed the surveys on their own (i.e., as questionnaires). They also were given the choice of having the questions read aloud, but everyone declined this option. Depending on the speed of responses and on how much time was devoted to the open-ended question, the members usually finished the surveys within five to ten minutes. Since members were engaging in their daily activities—that is, picking up their share—it was necessary to make the surveys brief. With the exception of some half members who picked up shares only every other week, the majority of members probably were made aware of the opportunity to participate in person. This presumed awareness was one reason I did not did not set up the recruitment table more times, as doing so likely would not have resulted in a substantial increase in participants; I also did not want to be removed from farm activities more often than necessary. Participants did not receive incentives.

DEMOGRAPHIC INFORMATION

Gender: _____

For how many seasons (including this one) have you been a member at Sweetwater? _____

What is the highest level of education you have completed?

A. Some high school B. High School Diploma C. Some college D. Associate degree E. Bachelor's degree
F. Master's degree G. Doctoral Degree H. Professional Degree I. Other

For the following, you will be asked about whether or not specific aspects are important considerations for you when buying foods. Please answer with yes or a no. You can also indicate that you are unsure.

1. Is price an important consideration for you when buying foods?		Yes	No	Unsure
2. Is freshness an important consideration for you when buying foods?		Yes	No	Unsure
3. Is shelf life an important consideration for you when buying foods?		Yes	No	Unsure
4. Is taste an important consideration for you when buying foods?		Yes	No	Unsure
5. Is the convenience of preparation an important consideration for you when buying foods?		Yes	No	Unsure
6. Is knowing the food source an important consideration for you when buying foods?		Yes	No	Unsure
7. Is the amount of nutrients an important consideration for you when buying foods?		Yes	No	Unsure
8. Is the amount of chemicals an important consideration for you when buying foods?		Yes	No	Unsure
9. Are ethical and political considerations important for you when buying foods?		Yes	No	Unsure

There is no universally accepted definition of organic, but according to the U.S. Department of Agriculture: "Organic food is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations...Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering; or ionizing radiation." Using this definition, please indicate whether organic food, non-organic food, or neither is superior with regard to each aspect of foods. You can also indicate that you are unsure.

10. Which type of food is superior with regard to price?	Organic	Non-Organic	Neither	Unsure
11. Which type of food is superior with regard to freshness?	Organic	Non-Organic	Neither	Unsure
12. Which type of food is superior with regard to shelf life?	Organic	Non-Organic	Neither	Unsure
13. Which type of food is superior with regard to taste?	Organic	Non-Organic	Neither	Unsure
14. Which type of food is superior with regard to the convenience of preparation?	Organic	Non-Organic	Neither	Unsure

15. Which type of food is superior with regard to knowing the food source?	Organic	Non-Organic	Neither	Unsure
16. Which type of food is superior with regard to the amount of nutrients?	Organic	Non-Organic	Neither	Unsure
17. Which type of food is superior with regard to the amount of chemicals?	Organic	Non-Organic	Neither	Unsure
18. Which type of food is superior with regard to ethical and political considerations?	Organic	Non-Organic	Neither	Unsure
As you probably know, community supported agriculture is a model in which members pay a single fee in advance, and, in return, receive a share of produce throughout the growing season. For this portion of the survey, please indicate whether or not community supported agriculture provides satisfactory results with regard to each aspect of foods. Please answer with yes or a no. You can also say you are unsure.				
19. In general, is community supported agriculture a model that provides satisfactory results for members with regard to price?		Yes	No	Unsure
20. In general, is community supported agriculture a model that provides satisfactory results for members with regard to freshness?		Yes	No	Unsure
21. In general, is community supported agriculture a model that provides satisfactory results for members with regard to shelf life?		Yes	No	Unsure
22. In general, is community supported agriculture a model that provides satisfactory results for members with regard to taste?		Yes	No	Unsure
23. In general, is community supported agriculture a model that provides satisfactory results for members with regard to the convenience of preparation?		Yes	No	Unsure
24. In general, is community supported agriculture a model that provides satisfactory results for members with regard to knowing the food source?		Yes	No	Unsure
25. In general, is community supported agriculture a model that provides satisfactory results for members with regard to the amount of nutrients?		Yes	No	Unsure
26. In general, is community supported agriculture a model that provides satisfactory results for members with regard to the amount of chemicals?		Yes	No	Unsure
27. In general, is community supported agriculture a model that provides satisfactory results for members with regard to ethical and political considerations?		Yes	No	Unsure
28. Do you have any other comments about community supported agriculture, organic agriculture, or foods in general?				

Figure 3.1. Survey content and formatting. This figure shows the questions and general appearance of the in-person survey that was completed by CSA members. The font size, spacing, margins were slightly altered from the original version in order to conform to formatting requirements.

Secondly, the survey was sent out online and completed electronically by 25 additional members. An IRB-approved recruitment message and accompanying link was included in Sweetwater's weekly electronic newsletter on January 19, 2012. Surveys were completed between that date and January 21. Participants submitted twelve surveys (48%) within five minutes of the start time and all but four surveys (84%) within ten minutes of beginning. Kwik Surveys was the survey tool employed.

To summarize, while the sample size and response rate were small relative to other studies and Sweetwater's estimated 300 members at that time, the multiple mediums of distribution likely led to most members being reached. Moreover, the sample was sufficient for basic statistical and exploratory purposes (Oberholtzer, 2004; Polimeni, 2011).

Data analysis. The in-person surveys were double-entered, cross-checked for errors, and then merged with the online data. All quantitative analyses were performed with SPSS (version 20). Given the composition of the sample, the goals of the research, and the dearth of continuous variables, descriptive statistics were of greatest interest. Nonetheless, nonparametric chi-square tests—which are most suitable for categorical variables—were run and, after statistical corrections, did not yield significant results (see Appendix A).

Participant Observation

My first visit to Sweetwater was in November 2010, and beginning in January 2011, I started participating at the farm for approximately eight to ten hours per week, the expected amount of time for interns. After IRB approval was received in June 2011, the recording of field notes commenced, and by the end of the year, I had notes on 39 visits,

covering about 200 hours. As 2011 drew to a close, my weekly hours gradually began to decrease, and my notes became less meticulous. Even so, I continued to volunteer almost weekly at the farm throughout the 2011-2012 growing season, with my average weekly hours declining to about five, on average. In short, in addition to taking the aforementioned field notes, I spent hundreds of hours at Sweetwater, fully engaging in a wide variety of farm activities—harvesting, planting, washing, seeding, and trenching among them. While not as systematic as interviews or surveys, these collective experiences were invaluable both personally and methodologically.

Purposes of participant observation. From an academic perspective, there were four chief purposes for the participant observation. First, it helped me connect with staff members and volunteers. Even though education is a mission of Sweetwater, I did not expect anyone to devote approximately an hour of their precious time to an unknown outsider. Next, the participant observation enabled me to gain an understanding of the daily operations at Sweetwater and, less importantly, to elicit insights that went beyond the pre-defined research questions. Thirdly, the farm experiences informed the creation of the interview guide and equipped me to ask appropriate follow-up questions. Finally, the participant observation conferred an improved ability to interpret the survey and interview data; in other words, it served as a tool for triangulation.

Note taking process and content. In most but not all cases, I wrote field notes in the evening following a day at the farm or on the day after. (The notes on my last seven visits were recorded at one time and, hence, comprised an unfortunate exception.) Working at the farm involved constant contact with dirt, and, thus, field notes could not be recorded immediately. Typically, I separated the notes into five categories: (1)

descriptions of the activities I engaged in; (2) accounts of other workers' undertakings (to the extent known); (3) insights, not including any names or personal information, gathered from conversations; (4) miscellaneous observations, if applicable; and (5) personal thoughts and commentary. To reiterate, the focus of the observation was on daily operations. Highly personal information was omitted for ethical reasons and because including an abundance of social or cultural material would have made the scope of the research unwieldy.

Chapter 4: Results

Semi-Structured Interview Results

The results of the interviews with staff members are presented below, including basic counts, where appropriate, as well as exemplary quotations. In order to maximize ease of reading and to ensure that confidentiality was maintained, I removed meaningless words and phrases (e.g., “you know” or “kind of”) and rectified grammatical errors. Moreover, instead of using real names, each participant was randomly assigned a number. Although these alterations diminished the personal feel of the data, they were necessary given the small sample size obtained from a named research site. The results should not be considered generalizable, but the viewpoints shared are nonetheless noteworthy and could aid in the development of future research, both quantitative and qualitative.

Definition and views of the term *organic*. When asked how they defined the term *organic*, participants often referenced the legal definition, noting the absence of synthetic chemicals. However, two caveats were evident in the interviews. First, most staff members believed that—ideally if not always in actuality—organic practices should involve caring for and building the soil. As stated by Participant 6, “Soil building is the main focus, which in turn goes along with healing the soil or the earth, the idea of leaving the land better after than before—instead of depleting it, enriching it with your

activities". Stated differently, "It's not just materials that are allowed or not allowed, but it's also the practice of building living soil" (Participant 1).

Secondly, one participant declared directly—and others implied—that the term, while still useful and better than the non-organic, conventional alternatives, had been "defiled" and divested of meaning:

> I think…the word organic has been somewhat defiled by the government regulation of it, and it doesn't mean much anymore except that it has been grown without the use of chemical pesticides and chemical fertilizers; but it in no way means that the practices are sustainable because…it's still very much diesel-based and so you're just changing the inputs…To me, all that it means is that no chemicals were used in the growing of it. (Participant 7)

Along similar lines, each participant was asked about how they perceived the relationship between *organic agriculture* and *local agriculture*. There was disagreement as to which one was more important, with two interviews suggesting that organic should take precedence over local and one interviewee outright stating the opposite. Still, there was a consensus that though foods should typically be both local and organic, this was not always the case. On one hand, "local agriculture can be totally chemical laden" (Participant 1); on the other hand, organic foods may be transported long distances, and, moreover, "if you're growing lettuce [organically] on a hundred thousand acres…it's not going to be good for the earth anyway" (Participant 6). The following quotation captures general sentiment well:

> I feel like now especially because organic is becoming more popular, you may go to [stores] and see something that says 'organic', but just because it's organic, that item was still shipped in from thousands of miles away, if it was in Central or South America or even California; so, just because something is grown organically, you have to think about how that produce even made it to your plate. So that's why I guess it's good that organic is becoming more popular, but I feel like it still needs to be local as well as organic. (Participant 4)

To summarize, the staff members distinguished between their ideal version of organic agriculture and the reality of organic agriculture, as legally defined and practiced. Ideally, organic agriculture would (with the possible exception of certain exports) be local and would not only require the absence of synthetic chemicals but would also demand caring for the soil, the plants, and the environment at large. Unfortunately, from the perspective of my participants, this ideal is not always realized.

General benefits of organic (not economic). Not surprisingly, nearly every participant, at some point in the interviews, affirmed the benefits of organic farming and foods to both human health (n = 7) and the health of the environment (n = 6), particularly when compared to conventional farming. (The one individual who did not plainly refer to the environment as a beneficiary earlier said that organic practices entailed "giving life matter to help [the soil];" thus, it is reasonable to presume that the environment was critical to this person as well.) The reward for human health was perceived to be a consequence of not only the lack of harmful chemicals but also of an increase in nutritional content:

> I believe that it should be healthier than conventional because conventional sees the soil as a medium to pump fertilizers into, but in reality, the soil is life, and so that kind of takes the life out of it. So, the food you get is going to be less nutritious. Maybe it has all of the big trace elements in it, but there's a lot more to nutrition than those. (Participant 7)

Furthermore, in addition to the people eating the food, three participants mentioned the health implications for the farmworkers themselves: "It's documented over and over again how pesticides and all the chemicals that we spray on the crops adversely affect the workers that are harvesting and working with the crops every day" (Participant 6).

In terms of the environment, staff members condemned the deleterious effects of conventional farming and extoled the beneficial upshots of organic, especially when done the right way. The former effects were seen as needing urgent mitigation, not only for the present but for the future:

> I think that conventional agriculture is one of the largest sources of environmental contamination in the world; and I think that's a problem that is looming for in the future, not only for consumers of food that has chemical residues on it, but really as a healthy planet. It's something that will need to be addressed and changed. (Participant 1)

Regarding the benefits of organic, participants' responses were often in accordance or intertwined with their earlier definitions of organic as—under ideal circumstances—being concerned with building, rather than depleting, the soil. One interviewee used Sweetwater as an example:

> When you're growing organic, part of the philosophy is not just your crops, but you're also trying to create a healthy ecosystem. So just like here at Sweetwater, we're not just fields [from] fence to fence; there's trees; there's ospreys nesting in those trees; there's woodpeckers; there's hawks, all sorts of other things that have nothing to do with us eating, but they're part of that ecosystem, and we're creating a healthy environment for them. (Participant 6)

Interviewees also discussed, typically within the context of health or sustainability, the distinctive advantages of organic agriculture for children and families (n = 5) and for future generations (n = 4). In the succinct words of one interviewee: "It's just trying to have something that is sustainable. I don't want future generations to look back at my generation and think of it as the one that [messed] everything up" (Participant 5). At the end of the interview, another participant volunteered these insights that encapsulate both of the aforementioned themes: "But we are not going to be existing one hundred years away. Our kids, grandkids, are all generations going to be living here. So, if we don't care, they will not have enough resources to live healthy [lives]" (Participant

2). In short, staff members were not merely attracted to the perceived benefits for themselves; rather, they weighed the significance of agricultural practices to their children, their families, and future generations (as well as the environment and other farmers).

In addition to the perhaps more conspicuous benefits of organic, three staff members talked about—from a buyer's perspective—the imperative to support sustainable and ethical practices by purchasing organically grown foods: "One reason I buy a lot of organic things besides the health issues and other things I said, is just encouraging the farmers to do that" (Participant 6). Stated differently, "When you buy something, indirectly…you are responsible for the harm caused with that, whether you know it or not. And so it's important to make responsible choices in your purchases because they do have an effect on the world" (Participant 7). Thus, although the interviewees were conscious of the personal benefits of organic, their viewpoint was often more outward-looking and holistic, taking into account numerous factors. While acknowledging the financial challenges facing people who wish to obtain organic foods, the staff members urged others to think holistically as well. (The views regarding the cost of organic foods are presented later.)

Farmers' motivations for choosing organic. During the interviews, participants were asked to assess, based on their own experiences and what they observed from other people, how much influence considerations of human health carried for farmers and buyers. To varying degrees, they were also encouraged to discuss other possible motivations. Nevertheless, the results should be evaluated within the context of the interview guide (Table 3.1).

In discussing motivations for farmers, interviewees unanimously agreed that human health was important, but the health of the environment and the desire for money were also offered as reasons for getting into organic farming.

The latter motivation (i.e., economics) was viewed unfavorably by those individuals (n = 5) who mentioned it, as it was believed that some entities were merely exploiting organic's rising popularity: "With businesses, I've always gotten the impression that they do it because people want to buy it, not because they think it's what should be sold to people… It's kind of the in thing right now" (Participant 5). Another interviewee, after referencing health-related motivations, expressed a similar sentiment: "There is a certain percentage of organic farmers who—and that really falls more to the large, more industrial size organic farms—who are choosing it as a business model, and not necessarily because they're personally committed" (Participant 1). Therefore, to belabor the earlier point, organic may be better than conventional, but according to participants, not everything labeled as organic is the same; organic farming practices vary, as do the ideologies driving them.

On the more positive side, both health- and environment-related motivations were perceived as common and laudable, with one individual noting that one should not be regarded more highly than the other: "So, I think people look at it from both sides. I don't think it matters; the fact is we're looking at the same thing" (Participant 6).

Since the health and environmental benefits were discussed earlier, the interrelated motivations do not need elaboration here. Suffice it to summarize, these two—each of which were viewed from diverse angles—were considered noble and valid reasons to go into organic farming.

Notably, when assessing the motives of conventional farmers, two staff members speculated that farmers were often just continuing what they had always known: "I feel like there's a lot of conventional farms out there, and if that's all someone really knows, then that's all they're probably going to do" (Participant 4). Stated differently:

> I think probably with conventional farmers a lot of it is just passed down from family to family, and they don't necessarily think, "Oh, I'm doing something bad". They probably feel that they are connecting to the land and that they are helping to give health to people, but when you're born in a backward society, it's hard to take a step back and look and see that backwardness. (Participant 7)

Thus, most participants did not address the motives of conventional farmers, but the two who did avoided casting blame for conventional farmers' actions. Instead, they speculated that conventional farmers were products of their social environments and family histories. (However, not every entity promulgating conventional production was perceived this way; as will be detailed later, large corporations were viewed negatively.)

Buyers' motivations for choosing organic. Unlike the perceived varied motivations for farmers, interviewees thought that buyers most often moved over to organic out of concern for human health: "With my experience, definitely the farming is more 50/50, like environmentalism versus personal health. For the consumer side, I think it's probably a lot more on the health side" (Participant 6). Oftentimes, according to participants, people became CSA members—or at least bought organic produce—because they were beset by a major health issue (e.g., cancer):

> I would say people don't care [about] what they eat until something goes wrong medically. When they come to the point that they have medical problems, when they go to doctors, then at that point people realize that they should eat healthy. And they begin eating healthy food. (Participant 2)

Another interviewee distinguished between older adults and young people, noting that the older generations grew up with less exposure to organic foods and farming than

the young generations. Consequently, older adults—instead of finding it early in their lives—frequently discovered organic due to a health crisis, or at least a commitment to maintaining health:

> I find that a lot of older people that choose to go to an organic lifestyle are doing so because they've had some major health issue come up and/or they are just trying to stay healthy, and so they're learning how to do that as they get older. (Participant 3)

In addition to the reasonable concern for one's own health, many buyers—as perceived by two participants—chose organic as a result of having children and being concerned for their welfare: "I know a lot of parents that switched to organic when they had children because they don't want to raise kids on hormones and stuff" (Participant 5). In other words:

> The trend that I see is when people have children, they really start rethinking their food choices because it's no secret that children are much more susceptible to the effects of chemical residues. And so I think people start making those choices and reevaluating those choices when they have children. (Participant 1)

Thus, whether motivated by personal health or the health of their families, human health was perceived to be the foremost motivation for buyers, at least at first. According to one staff member, once they become more immersed in the organic lifestyle, their motivations and outlooks shift:

> But the more they look at the issues, the more their mind opens up to things that maybe they hadn't thought before, just how bad our food system is and how it's not just our bodies we're ruining; it's our water system; it's our soil; it's our biodiversity; everything is connected. So that then makes it even more important to support organic or biodynamic or any kind of environmentally sustainable food practices. (Participant 6)

Other themes pertaining to organic. Aside from the comments specific to economic and political challenges (or a lack thereof) for organic agriculture, there are several cross-cutting themes that emerged from the interviews and warrant mention here.

First, multiple participants (n = 4) referenced how, in the past, everything used to be organic, and people were more connected with their food; conventional farming, in other words, is not particularly conventional: “Way back, [but] not even that long ago, most people had a garden in their backyard and some chickens and cows, and they made their own butter and eggs and milk; and they had produce; they had fruit; they canned” (Participant 4).

Furthermore, four interviewees believed that, in addition the already known damaging effects of conventional agriculture, there may be other tragic consequences of which we will only become aware in the future. GMOs were put forth as examples by two staff members: “We don’t really know what the impact of genetically modified foods is going be; it’s a big experiment” (Participant 1). The other staff member also spoke bluntly about GMOs: “So that’s the main reason why I’m really for organic is I don’t want to be a guinea pig” (Participant 6). Thus, the newness of conventional agriculture was a source of unease among participants. This quotation exemplifies the sentiment:

> But ultimately, if we keep throwing pesticides and herbicides and chemical fertilizers on the ground, we are destroying where our food comes from, and it’s only been a few generations that we’ve been doing that, and we have yet to really see the impact of it. (Participant 7)

Another notable topic was the awareness about organic agriculture. Despite the booming popularity of organic, there still, as articulated by four participants, are individuals who do not know about organic agriculture or who are confused about its meaning. One reason, as noted earlier, was the age-based disparity in exposure (n = 2). However, there also was a belief that businesses took advantage of misleading advertisements (n = 1), as well as legal loopholes that allowed for deceptive labeling (n = 1).

Thus, while organic has become a buzzword, many people—though by little fault of their own—lack a full understanding of what the term truly means; hence, more education is needed.

Relationship between organic agriculture and community supported agriculture. When questioned about the proportion of CSAs who use organic farming practices, interviewees agreed that that vast majority—90% or more according to two participants—of CSAs farmed in that manner. In two instances, interviewees used the phrase "hand in hand" to describe the perceived relationship between community supported agriculture and the organic movement.

Regarding the reasons for the disproportion, one staff member stated that, relative to community supported agriculture, the public was more knowledgeable about and attracted to organic agriculture; therefore, from a marketing perspective, it behooved CSAs to use organic practices:

> If [CSAs] don't do organic, people are going to think, "Why, I can go buy from the store. There is no difference." But when the community supported agriculture [farms] present their selves as organic, that's a plus…[People] are saying "there is an organic farm over there"…They don't say, "Hey, there is a CSA"…Many of the people, if they ask them, they don't know what CSA is. "What is CSA?" But they know organic farm. (Participant 2)

Thus, in the views of participants, the people who find community supported agriculture appealing are likely to support and expect organic agriculture as well. The onus is on CSAs to provide organic agriculture for their members. Stated concisely: "The people that these kinds of farms attract really want organic food for their families" (Participant 1).

In addition, since membership at a CSA involves seeing and participating in the farming, members would not want their food or the people growing it to be exposed to

harmful inputs: “If you’re coming to see your produce, would you [rather] see someone dousing it with chemicals or putting compost in the beds and showing you where your food is coming from? I feel like most of it would be organic” (Participant 4). In other words: “Most people with a CSA are going to grow organically whether or not they’re certified. And that’s when people are looking at you; you’re going to have to do it a good healthy way” (Participant 6).

Other marketing options. The advantages and disadvantages of the community supported agriculture model for farmers—both of which play into any decision regarding how to distribute produce—are detailed later. Nonetheless, participants briefly discussed alternatives to community supported agriculture and provided unique insights into the factors that farmers contemplate. Although Sweetwater chose the CSA model as its primary marketing strategy, other farms, as one interviewee explained, often do not: “There are a lot of organic farms that don’t use the CSA model. I think the CSA model, in Florida for instance, is probably a small percentage of all the organic farms” (Participant 1). In this section, I expound upon the aforementioned factors and alternatives.

Participants mentioned the following distribution-related considerations, among others: location (n = 2), profitability (n = 2), and demand (n = 1). Due to individuals being more spread out, remote areas were considered less suitable for CSAs. However, one staff member offered Colorado as a remarkable exception, explaining that CSAs did not have to rely upon just one centralized pick-up location:

> They have tons of CSAs out there, even though most of Colorado is fairly rural; but they’ve now figured out ways to have delivery points, and people’s own homes often become delivery points for maybe twenty families to come pick up. So, initially I would say if you were in a rural area, you’re probably better off

> selling at markets because you can take your produce to the various markets and sort of take it to the people. But now the same is happening with CSAs…You're still paying for a share of what they grow, but that food is being brought to a location that is now closer to where you live. (Participant 3)

Thus, despite the significant association between population density and number of CSAs, creative strategies can help CSAs overcome locational challenges (Schnell, 2007).

Next, two staff members spoke about the bottom-line profitability of CSAs, noting that other marketing strategies generally possessed greater potential for profit:

> CSA is kind of wholesale. The actual price per pound of total vegetables we give [members]—for fresh, organic, local vegetables—when you spread it out over the whole season, it's a great price. But since they all have to pay at once, it just seems like a large amount. So, if you can manage to actually sell those same vegetables at a farmers' market or a stand on the road or to a restaurant or something like that, you can actually end up making more money. So, that would be a reason to veer away from [the CSA model]. (Participant 5)

Another participant echoed those sentiments and stated that while community supported agriculture is "a very viable form"—particularly when supplemented by other sources of profit or operated on a comparatively large scale—sizable profits from the CSA itself were rare, and other motivations were more central:

> I think it has to go a little bit further than just how do I market my food; it has to have an ideology connected to it—community, education, that kind of thing, which is the basic mission of Sweetwater, which is why even though we're losing money on doing a CSA, that is our mission, and we are a nonprofit. So it's not really a business venture; it's an educational venture. And in a place like Florida where all of these movements—organic, CSAs—are really in baby stages, the impact is really strong as far as educating the community on food. And whether or not people stay season after season in the CSA, I think once they leave the CSA, their choices for food buying are going to be very changed; they're going be a lot more conscious than they might have been beforehand; so, that in itself makes it worth it. So, it's more ideological than business. (Participant 6)

In other words, interviewees suggested that for CSAs, profits are—or at least should be—secondary to education- and community-related motivations. Moreover, in

places where organic and local agriculture are still in the developing stages, educational initiatives can be particularly impactful and rewarding. According to one interviewee, the economic benefits of CSAs are greater in such low demand areas as well:

> Just as an example, here in Florida where we are, we are in a food desert, so to speak, in terms of organic produce and so it made sense for us to have a CSA and have people come to the farm and have the farm experience and get their produce from us and [for us to] be able to have that money, that funding, in advance of the season to continue to grow our CSA. However, in other parts of the country where organic is much more readily available and there tends to be fresh markets on every corner, if I were a farmer, I would definitely consider just growing food and selling it at the various markets, at the various co-ops because you have a little bit more control over what you grow and what you sell, and maybe you just decide to grow only certain vegetables that you know you can grow very well, and then you can go sell them at the markets because you'll know you'll get a good price for them. (Participant 3)

To summarize the decision-making process behind whether or not to operate a CSA, staff members acknowledged that the community supported agriculture model was not the best selection for every person or every location. Even so, the model affords exceptional educational and social opportunities, as well as the ability to receive money upfront, thereby decreasing financial risk.

Concerning specific marketing strategies and means for earning or saving money, farmers' markets (n= 4), selling to restaurants (n = 4), selling wholesale (n =3), setting up food stands (n = 3), selling to co-ops (n = 3), having a diversified, closed system (n = 2) (i.e., no or minimal inputs), hosting farm events (e.g., weddings) (n = 1), and producing value-added products (e.g., tomato sauce) (n = 1), were mentioned by participants. One staff member touted the value of creativity and making the most of the available resources: "See what you've got, and see how you can market that" (Participant 6). The individual subsequently described farms, whether they were CSAs or not, that used rotations of plants and animals to reduce or eliminate the need for external inputs:

> You know, we're not as lucky here, but we have a zoo two miles away, and all their manure, instead of being shipped away into a dump, it's being brought here, we make it into compost, and that's our fertility system right there. So it's kind of a closed loop within our city, and we're a city farm, so we're taking resources that would be wasteful in the city, and we're turning them into a very valuable resource as a fertilizer for our farm; so we're reducing waste; we're reducing expenses. Compost is probably the hardest thing for most farms to afford. All we have to do is pay the fuel and the tractor operator, and we have almost as much as we want. So definitely striving for that closed loop is beneficial economically in the long term and definitely ecologically. (Participant 6)

Thus, being in an urban setting has both its advantages and drawbacks, but Sweetwater worked out an agreement with a local entity that enabled the farm to simultaneously reduce environmental waste and monetary costs.

For Sweetwater, the CSA is undoubtedly the highest priority, with education and community building as key goals. Nonetheless, the farm has distributed to food co-ops: "We have a couple of co-ops that give us an order early in the week, and then we fill it at the end of the week" (Participant 4). In addition, Sweetwater holds a Sunday Market during the growing season, which is open to the public, and attendees are invited to purchase from local vendors, enjoy live music, and view or partake in farm activities (e.g., harvesting, washing). According to one staff member:

> The Sunday Market makes a little bit of money, but it's also mostly a marketing tool for us because we're open to the public, so it brings people here on a day when they feel hopefully comfortable [coming], and they can kind of poke around at their leisure and get a feel for what we're all about. (Participant 3)

In short, organic farms are not limited to any particular marketing strategy. Depending on their goals, skills, and location, among other factors, they can employ any combination of strategies to decrease costs and increase profits.

Advantages of CSA for farmers. Interviewees were asked to identify the *advantages* that the CSA model offered to farmers. Based on my analysis, they referenced the following seven benefits: payment in advance of the season (n = 6),

connecting with people (n = 5), convenience of distribution (n = 3), having built-in support (n = 2), being able to care for the plants and the environment (n = 2), personal fulfillment (n = 1), and providing education (n = 1). The top three receive attention in this section.

First, all but one participant referenced the benefits associated with being paid up front. Being paid in this manner provided psychological relief and a buffer against unforeseen events:

> Farming is pretty risky as far as you can have all the good intentions and all the good techniques and whatever, but nature is going to do what nature is going to do. So whether it be a plague, or a storm, or a flood, or a drought, you can easily lose a good amount of your crop. So the whole CSA concept is…having the consumer actually share some of the risk of farming with the farmer…So, here [with a CSA] it's guaranteed, so that's a big relief right there, where no matter what you have that money. (Participant 6)

In addition, the advanced payment allowed for greater certainty and ease with budgetary planning:

> It's probably a lot easier to set a budget and really know exactly what to expect from season to season because you can set your prices and you want to set the number of memberships that you're going to sell. Assuming you sell out, then it's very easy strategically to set your budget for the year and know that you're going to be able to meet salary requirements and pay the bills; whereas if you're selling to markets and individuals and co-ops, of course that's much more variable. (Participant 3)

Despite being the most frequently referenced benefit, the upfront payment—as perceived by staff members—was not purely advantageous; instead, it accompanied two challenges for farmers: planning and being consistent (n = 3) and having an inflexible budget (n = 1). In the words of one individual: "You have a lot of pressure now to produce, and you need to do the best you can to produce to keep those CSA customers coming" (Participant 6). Stated differently:

> It's a big risk as well…You are committing to however many members that you're going to provide food for them for the season, and so if you're not able to provide that, you can easily shut yourself down after just one season. (Participant 3)

In other words, CSA farms cannot simply collect money and then relax. They have a commitment to uphold and a reputation to develop or maintain. Receiving payment in advance may guarantee that the farm will have funds for the season; it does not, however, ensure long-term survival.

Furthermore, the payment system so central to community supported agriculture—though providing relief and, in most cases, fiscal predictability—possesses a financial downside:

> It's nice to have the money upfront from members to provide them with their produce, but if there are unforeseen like obstacles, like if a tractor breaks…or if we need to acquire more land like we're doing now—there's a lot of money that's needed [and] we can't just go back to the members and ask them for more money. (Participant 4)

Thus, the CSA model ordinarily reduces the risk of growing for farmers. However, when unusual and adverse circumstances arise, the inability to collect more money can be problematic. At Sweetwater, for example, the farm unexpectedly had to move (albeit not immediately) to a new field in the middle of the growing season, a transfer that required clearing land, adding compost, installing irrigation, and the like. Also, during the 2010-2011 season the farm invested thousands of dollars to apply for rezoning and avoid closure, an effort that was highly publicized, well-supported, and ultimately successful (Mariani, 2011). With situations such as these, the inability to collect more money—except on a donation basis—becomes a hindrance rather than an aid.

On the other hand, as I witnessed myself, the community support encouraged by the CSA model can be helpful in such circumstances. People wrote letters in support of the rezoning effort, and labor, equipment (e.g., a trencher, backhoe, and greenhouse), and materials (e.g., compost) were either loaned or given to help develop the new field.

Continuing with the advantages, connecting with people was another common response (n = 6). Farmers generally enjoyed being a part of a community and seeing the people for whom they were growing: "For me, the advantage is creating the feeling of community and giving people a place to come together and experience some of the joy of food and all the things surrounded with it" (Participant 1). Worded differently:

> It's also nice when you're distributing the produce…that you get to see the people you're handing the produce to; you're not just putting it on a truck, and it's going to a supermarket, and you never get to see who eats your food; you get to just hand it over to people, and they ask you about recipes and how to make a certain dish; so it's cool; you have a connection with the food and also with the families who are eating the food. So, I like that part of it. (Participant 4)

Lastly, three interviewees noted the convenience of distribution associated with the CSA model, as farmers—at least with Sweetwater's centralized setup—did not have to transport produce to markets or attempt to attract customers on a weekly basis. Instead, two times per week, the staff arranged bins of food in the main barn, and CSA members signed in and picked up their share. At least one person monitored the bins and refilled them, as needed. Typically, this was not a difficult process. As voiced by one interviewee:

> It's also convenient not to have to deal with…are they picking it up or are we delivering it? Are they going to show up on time? It's like we have a market time, and they just have to show up; that's part of what they're paying for is to come pick up at a certain time. (Participant 5)

This arrangement could be difficult for members, but for farmers, it was an advantage. To be clear, consistently producing and harvesting enough for the share was a challenge that required months of advanced planning. However, according to interviewees, the distribution itself was simple:

> You grew it. You know how much you needed to grow. You harvest it. People pick it up. It's all done. You don't have to be peddling your vegetables all the time and going to markets and paying vendors fees or paying for gasoline to go all over the place and sell your stuff. (Participant 6)

Challenges of CSA for farmers. Conversely, I asked staff members to describe the *disadvantages* or *unique challenges* for farmers—not only themselves but others as well— associated with community supported agriculture. These were the challenges they identified: having to regularly interact with people (n = 3); needing to plan ahead and be consistent (n = 3) (discussed earlier); pleasing the members (n = 2); educating members (n = 2); communicating with members and others about the farm (n = 1) (e.g., informing them about how weather will affect the harvest); dealing with an inflexible budget (n = 1) (also mentioned previously); lacking to ability to be creative and explore new options (n = 1); and possessing leftover food because members did not pick it up (n = 1). Three of the top four receive elaboration here. The one exception is the requirement of consistency, as it was sufficiently covered in the preceding section.

To begin, interviewees noted that the incessant socializing inherent in community supported agriculture was not for everyone: "But some people just aren't into the social interaction that comes with a CSA and that constant communication with the members, opening up your farm to the public; some people just aren't comfortable with that" (Participant 6). Another individual echoed this perspective: "A lot of people who don't choose the CSA model really prefer to deal with a smaller number of customers, a

smaller amount of headaches. You don't have to have a bunch of people poking around the farm all the time" (Participant 1).

Thus, interviewees generally appreciated the opportunity to connect with CSA members and other farm visitors, but they also acknowledged that not everyone would view this as an advantage. Drama and complaining were inevitable results of people paying money up front and gathering in one place for an extended length of time. As one interviewee stated: "The members complain a lot, and avoiding that would be a pretty good reason not to do a CSA" (Participant 7); the individual went on to explain: "It's really not that many but like in any situation, the complainers are the loud ones, so they're the ones you remember". So, most interactions were viewed positively as chances to learn and connect with like-minded individuals. However, though rare, unpleasant exchanges did occur, and they comprised a valid reason to opt for a marketing strategy other than community supported agriculture.

Along similar lines, pleasing members—each with different desires and (sometimes unrealistic) expectations—was considered a challenge by two interviewees. Sweetwater's staff attempted to address members' perceived needs, but this was not always possible:

> You can't really please everybody, but we try to give enough produce and enough variety for people. But there are always certain people who would like more lettuce or certain people who are sick of radishes; so it's kind of interesting trying to meet everyone in the middle and please all the members who have paid for these vegetables. (Participant 4)

According to another participant, weather conditions and concern for the land both limited what could be grown and to what extent; for that reason, it was important—and a challenge in itself—to inform members about unfamiliar foods and seasonality:

> You can't please everybody, and you can't really try. You have to balance what's good for the farm and the soil and just deal with people, and a lot of dealing with people means educating people on how to cook things they might not be familiar with and how to eat seasonally. (Participant 6)

Another interviewee added that members typically expected to receive information from their CSA:

> And answering questions, when people join a [CSA], they expect a certain amount of personal attention and customer service and one-on-one time as far as asking their questions and learning about the various vegetables and how to prepare them. And so if you're going to have a CSA, I think you have to also be prepared to educate people on a lot of different things. (Participant 3)

Hence, two of the greatest rewards of the community supported agriculture model—connecting with people and providing education—were also, according to participants, two of the greatest challenges (but not necessarily disadvantages). Farmers should take their responsibilities to their members seriously. However, crops only grow locally during certain times of the year, and it is not reasonable for members to expect to receive an unceasing supply of any particular food. When such unreasonable expectations are present, education is needed, and staff members should be ready and willing to provide it.

Advantages of CSA for members. I asked interviewees—who received a share of the harvest but technically were not members themselves—to identify the *benefits associated with* or *positive aspects of* being a member of a CSA. They cited these ten, many of which were interrelated (i.e., only distinguished by key words): connecting to other members and visitors (n = 7), connecting to your farm and farmers (n = 6), exposing children to a positive environment (n = 5), having the opportunity to learn (n = 5), obtaining high-quality food (n = 5), getting fresh, organic food that is cheaper than from other places (n = 4), being able to participate in farm activities (n = 3),

experimenting with unfamiliar foods (n = 2), having enhanced psychological well-being and fulfillment (n = 2), connecting to food and nature (n = 2), and being able to see and ask questions about anything related to the farm (n = 2). Next, I expound upon the top six.

First, all seven interviewees touted the opportunity to socialize with numerous members and other individuals who visited the CSA. As described by one participant:

> I see connections happening, though. People in line talk about how much they love this, and then, [Sweetwater doesn't] have eggs, so they'll talk about where they get their eggs; and, "Oh we get it from the same person; wow, we should go at the same time!" And it just ends up connecting other people that are organically minded. (Participant 5)

Another interviewee observed similar occurrences, noting that the benefits of CSAs should not be evaluated from a purely economic perspective:

> Here at Sweetwater…we have a thriving community; we have people who come here and have made friends here, lifelong friends, have gained employment through people they've met at the farm through their different businesses and people whose children were born into the farm and are growing up coming to the farm, and it has a value that doesn't show up on a spreadsheet. And so there's community value there that is not so quantifiable from a monetary perspective. (Participant 1)

In short, while Sweetwater's Sunday Market undoubtedly contributes to the feeling of community at the farm, the CSA model itself—whereby the same individuals pick-up from the same location for an extended period of time (i.e., at least the growing season)—is believed to facilitate connections among those members who are looking for them.

Similarly, six participants explicitly referenced the unique chance to connect with the farm and farmers. Interestingly, two individuals stated that—in contrast to other food buying venues—members of CSAs are not simply customers; they are familiar people,

for whom the distance between them and their farmer has been reduced: "[With] CSA…you feel that connection with the farmer; you're part of the farm. You're not just the farmer's customer" (Participant 7). Worded differently, "If you go to a CSA, you're more casual; you're not thinking that you're a customer; and whoever grows doesn't think that you're a customer; so, you're getting friendlier and more connected" (Participant 2).

Moreover, staff members spoke about the distinctive benefits of community supported agriculture for children, explaining that the farm provided not only a place to encounter nature and enjoy themselves but also a lasting educational experience that was rare in contemporary times:

> Kids, usually in this education system, they don't know how their food grows because we don't teach them anymore. So, this is a good way to learn how life starts from the seed…So, you have a farm; you're teaching the kids how their food grows, and they're not going to forget. (Participant 2)

As stated by participant—and based on my time at the Sweetwater, I certainly agree—the beneficial effects of the farm experience on children were readily apparent: "[Children] run around having fun and like snacking on a carrot. They don't demand ice cream. If they want a treat, they want like an organic smoothie from the stall; it's cool seeing that" (Participant 5).

Fourth, staff members (n = 5) stated that receiving fresh, healthy, tasty food—rather than food that was transported a long distance or stored for an extended period of time—was a benefit of CSA membership. One individual associated taste with freshness: "When we get [food] from the community supported agriculture [farm], maybe the same day or the day before it had been harvested; the taste is completely different" (Participant 2). Another interviewee stated that there were health benefits not only of

organic foods but also of fresh, CSA-grown foods: "[Members are] getting food that is fresh; it was harvested that day, maybe the day before. So if it's fresh, it means it has more vitality, which means more of the nutrients are going to be absorbed by your body" (Participant 6).

Furthermore, interviewees (n = 5) referenced, explicitly or implicitly, the value of learning from the farm experience and conversing with other visitors. One staff member—after describing how important volunteers were at Sweetwater—stated that this learning sometimes came from working in the fields: "It really is volunteer-run; it's cool. And people [are] coming out, lots of people who want to start their own garden and are coming for tips" (Participant 5). Personally, I can endorse this statement. During my countless hours at the farm, not only did I learn an immeasurable amount myself, but I noticed that the conversations frequently involved the exchange of practical gardening- or farming-related information.

Finally, three interviewees believed that the price of organic food from CSAs, or at least from Sweetwater, was lower than from other food buying locations. Another staff member cautioned, however, that while the price of Sweetwater's share was completely reasonable, it should not be a motivation for signing up for a membership:

> That should not be the reason for someone to join a CSA, to save money; it shouldn't even be in the list because obviously it's not saving money if they get more produce than they can actually eat and they're having to throw or give some away. (Participant 3)

The individual, responding to the question about whether or not community supported agriculture was for everyone, continued:

> So no, it would not be for people who are trying to save money; for those people, I would say, go find a local farmers' market and try to buy just exactly what you

> need and get the best price on it. But it's right for a certain percentage of the population. (Participant 3)

Disadvantage of CSA for members. I also asked participants to describe, from their point of view, the *negative aspects of* or *challenges associated with* being a member. Interviewees noted these six: Having to pick up at a particular time and location (n = 5); not being satisfied with the foods provided (n = 4) (e.g., too unfamiliar); taking on the risk, meaning that you may not receive what you expected (n = 3); having to invest extra time to prepare foods (n = 2); paying money upfront (n = 2); and being asked to work at or for the farm (n = 1). Below, I elaborate upon five of these challenges; having to furnish a lump sum payment for food is straightforward and does not need elaboration.

Concerning the challenge of picking up, staff members understood that—although the farmers' side also had to be considered—coming to the farm during the specified hours and days was not necessarily easy:

> A lot of time I hear [about] the inconvenience of having to pick up on a certain day at a certain hour. Sometimes people miss their pickup because they're out or they're working or whatever, and then they want to make it up, which is impossible on the farmer's side of it. So, you go to the supermarket when you can; you go to the CSA pickup when it's pickup time. (Participant 6)

As one participant communicated, traveling could result not only in the loss of food but, in some sense, in the loss of money: "If you want to go out of town, you already paid for your food that week, and…you don't have to pick it up, but [if you don't] then that's money that you could have saved" (Participant 7). (In such cases, people could have someone else pick up their food during the designated hours, but this obviously was not possible for everyone.)

Next, interviewees (n = 4) noted that CSA members did not have a say in and were not always satisfied with the foods that they received. One staff member's response summarized this theme well:

> If you're not used to the way the model works and you're just kind of joining to get produce and feed your family—if you don't know the other side and the farmer's side—you might set yourself up for disappointment. Because the produce does vary throughout the season; we try to give you as much produce as we can, but the size of the share does vary week to week, as do the items. So if you're used to going to the store and just getting lettuce, carrots, broccoli, and that's it, we kind of give some different stuff, like kohlrabi, escarole, mustard, kale; so if you're kind of new at the whole CSA thing, you might be a little disappointed if you don't regularly use those items. (Participant 4)

In other words, Sweetwater and other CSAs grow what is seasonally appropriate and suitable for the soil. To reiterate an earlier point, any person who signs up for a CSA membership should be prepared to receive a variety of items, some of which may be unfamiliar at first.

Additionally, interviewees (n = 3) suggested that taking on the risk of farming was not a fashionable catchphrase; rather, the risk was real, as farming was a precarious endeavor that required not only skill but also the cooperation of nature:

> You're sharing the risk, so you're not guaranteed a harvest all the time. Usually CSA farms will bend over backwards to make sure their members are getting a fair share, but they're always prone to the possibility that something will happen, a natural event or something, where there will be less food or no food. So, that's part of being a CSA member; that's part of the whole concept really is that shared risk; so there's a shared risk, and there's a shared benefit; so it goes both ways. (Participant 6)

One individual suggested that before purchasing a share, prospective CSA members should investigate and visit the farm of which they intend to become a member, especially if it does not have a substantial track record:

> You are definitely taking a risk, so I would never join a CSA that I didn't personally get to know a little bit before I joined, whether that be by volunteering

> or just speaking with people personally several times and trying to get to know them better. (Participant 3)

Thus, if a CSA fails to honor the commitments to its members, it will likely be unable to sell shares the next season and will have to shut down. However, once a person provides money to a CSA, there is a risk—however sizable—that they will not receive the proper return on their investment.

Moreover, since most, if not all, of the items you receive are perishable, being a member of a CSA necessitates a greater investment of time into the preparation of foods:

> You're not buying bagged lettuce, so you have to go home with a big basket of food; and you have to wash it; you have to cut it up; you have to put it in bags. So, it's extra work for whole food. So, you're either getting whole, nutritious, real food and investing that time, or you're getting it easy at the supermarket, but then now you don't have the nutritional benefits and all those other benefits from the past question [about organic foods]. So it's an investment in time and in work for the member, but I think the benefits outweigh that by a lot. (Participant 6)

In addition, unfamiliar foods forced members to find recipes and experiment with foods. According to interviewees, this could be viewed as either a benefit or a challenge.

Finally, one staff member stated that expectations to work at a CSA may be problematic for certain people: "Sometimes you have to put in work hours in order to be part of a [CSA], and for some people, that might be considered a negative, if they're very busy or don't have any interest in doing that" (Participant 3).

In my own experiences at Sweetwater, there was a subset of members who regularly participated in farm activities not out of obligation but to learn about growing food, socialize, experience the outdoors, among other reasons. Then, there was a small percentage of individuals who struggled to make it out to the farm for the requested four hours during the growing season. (This was surprising to me, given how flexible Sweetwater was with volunteer hours.) In other words, participating in farm activities

was clearly a beneficial aspect of membership for many individuals and families. However, it was not for everybody.

Other CSA-related themes. Informed by my participant observation (i.e., witnessing a small number of seemingly unreasonable complaints), I asked staff members two questions, the first of which was in the original interview guide: (1) Would you recommend that all people become members of a CSA? In other words, is community supported agriculture appropriate for everyone? And (2) Do you think some people sign up without fully understanding what community supported agriculture is about? (The second question varied slightly in wording and was not asked to everyone, depending on time constraints and on whether the interviewee had spoken about it already.)

Answers to the first question were diverse and do not need to be broken down. Nevertheless, in general, participants thought that although community supported agriculture was a superb way to meet people and become part of a community, it was not appropriate for everyone: "I definitely think joining a CSA is only for certain people who want to be part of a community, and not everybody wants to do that" (Participant 3). Said another way:

> There are some people who expect it to be like the grocery store and want to get what they want, when they want it, and the way they want it; and people that have that priority and that sort of thing is important to me, this is not a good model for them. (Participant 1)

According to one interviewee, farmers' markets—albeit not necessarily in Florida—and food buying co-ops were the best alternatives for people not suited to community supported agriculture:

> In order to support local, organic farms, you have several options; I mean CSA is definitely a good option, but I don't think it's for everybody. Farmers' markets are another good option, which they're getting better in Florida, but mostly they

> suck—just lack of farmers…But the farmers' markets that do have farmers, that's definitely a viable option. Another good option is food buying co-ops that are buying from local farms, and we supply to a lot those, and I think that's a great idea. So I definitely think everybody should buy local, organic produce, but not necessarily from a CSA; I think it takes a certain type of person for that. (Participant 6)

Fascinatingly, five participants commented—whether solicited or unsolicited—that people often signed up for the CSA without understanding what community supported agriculture was about. This sometimes resulted in complaints, but it also created an opportunity for education:

> People will [join] here thinking [it's] either for health or "hey, it's the fad, it's cool" or whatever but not necessarily fully informed, and the more you talk to them, the more they talk to each other, the more they read, there's definitely a large education about just how important this is and just how it's connected to everything else…You can see that with brand new members, and as the season goes through, just the types of questions they ask, the type of things they're concerned [about]; they're really opening their minds to the world and to how everything matters. (Participant 6)

Furthermore, one staff member supposed that some individuals preferred to learn from experience—that is, from being a member for a season—rather than from doing their own prior research into the pros and cons of the CSA model:

> I think that's just the way some people learn. They would rather just dive in and do it and find out later, and the money side of it is not that big of an issue to them. Whereas there's a lot of people who are the complete opposite of that and want to learn every detail about it before they make the decision to spend $700 for produce. And there are a lot of factors that go into their decision-making, but yeah, we have a lot of turnover and a lot of people who don't really research it very well before they join. (Participant 3)

Despite the decision by some members to not renew their membership for the following season—and in spite of the "handful" of complainers—interviewees stated the majority of members seemed to be pleased with their experiences at Sweetwater. In the words of one participant, "I hear lots of [members] talking about like, 'Oh yeah, this is

my sixth year here, and I love it!' They're always very proud of how long they've been here" (Participant 5). Stated succinctly: "The large majority of our members are happy" (Participant 1).

These perceptions of satisfaction are supported by the 66.6% and 52.9% renewal rates for the 2011-2012 and 2012-2013 growing reasons, respectively (Program Director & Office Manager, personal communication, October 23, 2012). While only slightly greater than half, the latter percentage is high considering the dramatic, unforeseen events that occurred during the 2011-2012 season (discussed below). It is also comparable to rates reported in other research (Oberholtzer, 2004).

Conclusions about the CSA model. To summarize, staff members were supporters of the CSA model, extoling the distribution of fresh, tasty, local foods, as well as the connections and learning that the model facilitated. In their view, it was an appropriate choice for many farmers and buyers. Nevertheless, interviewees also acknowledged and sympathized with the challenges associated with community supported agriculture. They implied that prospective members need to do their research and decide whether or not the model would work well for them.

Crop yields of organic farming versus conventional farming. The final eight questions of the interview guide were based on the fourth research question—that is, what, from the perspectives of Sweetwater's staff, are the unique challenges associated with organic farming, as compared with conventional farming? Since they all pertain to one overarching question, the summaries of responses have been greatly condensed.

Regarding crop yields, all but one participant believed—whether confidently or not—that the crop yields from organic farming compared favorably against the crop

yields from conventional agriculture, especially over the long-term and when done the right way (e.g., locally). Five individuals referenced, at various points, the depletion of soil that they believed was a consequence of conventional agriculture, thereby making it less productive than organic agriculture: “If the crops aren’t rotated and you’re growing one single item and you’re spraying the heck out of it, eventually that soil is not going to yield what it used to yield” (Participant 3). One interviewee added that because organic foods were more nutritious, a smaller amount was needed to be equivalent to conventional foods.

Following accordingly, participants agreed that, in terms of yield, organic agriculture could probably feed the world. However, two interviewees questioned the validity of the question, noting that there was a surplus a food in much of the world, but distribution and exploitation, not production, were the problems:

> Food is a big money industry…There’s people that are so fat they’re dying, and there’s people that have no food, and they’re dying. There’s something wrong right there, and it’s the whole social structure. So that breaks away from farming and goes to, there’s something big that has to be fixed. Definitely organic farming can feed the world, but our food structure has to change...I think even better for organics is that when you’re doing it regionally…you’re growing the food for yourselves. You’re not going to destroy your land. But if you go to another country, buy up a hundred thousand acres, grow food, poison it, the food doesn’t grow anymore, you just go somewhere else, and you buy another hundred thousand acres, and you keep moving. That’s what’s happening. And that’s what’s destroying people, communities, and land. But if you’re doing it on a small scale where you’re growing for your community, you’re going to treat your land right; you’re going to grow your food healthy. So it has to go down to that level; it has to in order for it to work. (Participant 6)

The other person also spoke about the large amount of food in the world that is produced but goes to waste, even as people are hungry. The individual subsequently added that a long-term view was needed:

> Feeding the world to me is something that lasts forever, and you can't do that with something that isn't forever. You need something sustainable, and organic is the way to do it, where I can do it and my kids can do the same thing and they can do the same thing, and it'll continue functioning. We need something that will work for generations, not just at the moment. And I hate that there's people starving, but if feeding everyone kills every single person a hundred years from now, then we did it wrong. (Participant 5)

In short, based on responses, the question of whether organic can feed the world may demand a new approach. Given the widespread occurrence of both over- and under-nutrition, evaluations of food supply need to take into account not only production but also distribution and access (Hossain, Kawar, & El Nahas, 2007; Prentice, 2006).

Economic advantages and disadvantages of farming organically. In terms of economic *benefits*, participants mentioned these five: getting more money for your crop (n = 3), being able to access certain markets (n = 2), having a closed loop requiring minimal inputs and technology (n = 2) (discussed earlier), being able to farm the same land for a longer period of time than you could with conventional practices (n = 2), and having a supportive community to help the farm (n = 1). As the following quotation illustrates, the economic benefits were perceived to be particularly palatable over the long-term:

> With organic, you're thinking hopefully generations down the line, and if the land is treated right, your great grandkids should be able to farm it, and it should be fertile soil; it should more fertile each year. So in that sense, I think yes, there's an economic benefit to organic; it's just not right away. (Participant 6)

By contrast, interviewees identified these economic disadvantages: the intense labor (e.g., weeding) demanded by organic agriculture (n = 4), the lack of subsidies available for organic farms (n = 4), and the high cost of organic certification (n = 3). In the view of one staff member, the long-term costs, broadly defined, of conventional

agriculture were massive, but in the short-term, growing conventionally was simple and more affordable:

> In the short-term, [growing conventionally] is cheaper; it is a lot easier; and it is a lot less labor intensive. You know all the weeding we've done. In conventional, you just put on a backpack, and you spray, and you zap all the weeds—very easy. (Participant 6)

Thus, according to participants, there were economic advantages and disadvantages to both forms of agriculture. Going back to earlier points, one participant stated that the primary benefits of organic were not economic:

> I think it balances out because you can get more money for your product if you grow it organically, but it costs you more to grow it. So I think in the end it's about neutral. So the benefit is more social, environmental, community; it's more ideological benefits versus economical; I think it really ends up about the same. (Participant 6)

Policy and organic agriculture. Along similar lines, participants decried the absence of political support for organic agriculture, with individuals (n = 4) mentioning the disproportionate amount of subsidies that went towards conventional farming:

> I think, you know for how much taxpayer money that goes into large scale conventional farms and subsidizing them, if that equal amount went to organic farming, it would be really really good; but it's not even close; it's peanuts [compared to] what goes into organic farming. So politically, there's not much of a focus. (Participant 6)

Moreover, three staff members indicated that there needed to be stricter regulation of conventional growers. This quotation captures the feeling well:

> I think that there should be agricultural policies that require conventional farms to manage their environmental impact…They should be required to ensure they're not adding to the pollution of our groundwater, of our air and streams and the health costs to hired labor and the health costs to consumers that consume their products and consume chemical residues that can affect their children and themselves. (Participant 1)

Finally, five interviewees expressed discontent with the vast influence of large corporations and with the power imbalance that favored conventional agriculture. According to two people, there were excessive, unjust policies oppressing well-intentioned farmers. In the words of one, "The small family farms and the organic farms are not only not getting subsidized, [but] there's so much regulation that it's really hard to make it feasible" (Participant 6). The other participant pointed to the time and money conventional agriculture devoted to lobbying politicians as the reasons for the overregulation:

> [Organic farmers] just don't have the money to have the lobbyists that Monsanto has. So that makes it so it's harder. There are some very strenuous rules on organic farming…I'm not even saying [politicians are] necessarily taking money and intentionally screwing over the organic people, but if all they ever hear is the lobbyists from one side, they're making decisions based on an incomplete picture. So it makes it difficult with organic farming that we don't control the legislation of organic farming as much as other businesses control the legislation of themselves. (Participant 5)

Thus, interviewees expressed frustration at the backwardness of a political system and power structure that, in their view, promoted costly and deleterious food production while simultaneously overregulating and failing to support more sustainable, beneficial farming practices. To conclude with an apt quotation, "Things like what we're doing here [at Sweetwater comprise] a small small step, but something radical has to happen because it won't change; but it has to change." (Participant 6)

Elitism and cost of organic foods. To varying extents, all seven interviewees expressed understanding of the high short-term monetary cost of organic foods. As one staff member stated:

> I feel like even I don't have enough money to go to the grocery store and just buy organic foods, which is why I try to get a lot of food here [at Sweetwater] or from

> local producers; but if you're just a family going grocery shopping and you try to buy all organic, it can get really expensive. (Participant 4)

However, interviewees did not regard the criticism of organic foods as too costly as entirely valid. One reason, provided by four participants, was that there were "hidden costs" to conventional agriculture—that is, taxpayer dollars for subsidies and the aforementioned harmful effects:

> I think that organic food, while it is more expensive in the short-term, is cheaper in the long run. There are hidden costs to buying conventional foods that are not included in the price at the stores, and those are health and environmental costs that will be shifted to future generations. (Participant 1)

Moreover, three participants suggested, directly or indirectly, that many individuals did not ascribe the proper value to foods and that people's priorities were out of order. As one individual stated bluntly:

> How much did your car cost? Do you have a DVD player? Do you have a flat-screen TV? It's priorities…So it's one or the other; you can either spend a lot of money and know that the people that are growing your food are being treated fairly, paid fairly, and your food is being grown in a healthy way; or, you [can] buy really cheap food and know that you're probably killing people in the process…You have to have priorities in life, and I think food and health—and not just your health but the health of the people growing your food and the health of the people depending on the watershed next to that farm—you have to think of that. And when you pay more for organic, you're paying for that; you're paying for all that health and for all that benefit. So, people should be happy to pay for that. (Participant 6)

Another staff member asserted that with doctors and lawyers, the general public associated higher costs with better quality. However, people did not make this cost-quality association with their food because they undervalued it. The interviewee offered another example:

> If you want to buy something, a good product, you have to pay for it. If you want to buy a *Dolce & Gabbana* purse, you're paying a lot of money, but you're not complaining about it. It's a good brand. And [if] you're eating healthy food…you have to pay for it…I don't think it's a good criticism. (Participant 2)

Thus, while participants generally agreed that a number of individuals unfortunately could not afford or access organic foods, there was also a prevailing opinion that the costs at the store were distorted, hiding not only the long term-personal (e.g., medical bills), societal, and environmental costs but also the true cost of food production. Moreover, some interviewees stated that—being a fundamental part of human life—people probably should appreciate and pay more for their food.

Furthermore, the responses cited immediately above were likely also aimed at that criticism of organic agriculture as being *elitist*. Nevertheless, only three interviewees directly addressed the term, with two people saying that, at times, it did become elitist. The other staff member attributed the perceived elitism to a lack of public education and understanding (i.e., not recognizing the holistic benefits of organic). Notably, one participant stated that, while there was an air of superiority among a small number of outspoken organic supporters, such people were rare at Sweetwater: "Generally speaking, coming here, you're not coming to an elitist crowd. These are people who are just here to enjoy life; it's not elitism" (Participant 5). Moreover, the individual ultimately dismissed the critique, noting that elitism was ubiquitous and not exclusive to organic agriculture:

> I remember people who look down on me because I don't do what they're doing regardless of whether it's organics or [something else]. So I would say [the criticism is] not valid because no matter where you go, you're going to find people who are elitist. (Participant 5)

Increasing access to organic foods. As told by participants, the farm was in the midst of a "transition year," and the CSA members were the top priority. However, Sweetwater did what it could to increase access to its foods and was hoping to do more in the future.

Specifically, Sweetwater regularly donated foods to a local partnering organization, a food bank, a chapter of another group, vendors, and volunteers. One interviewee elaborated upon the partnership in which Sweetwater received land for their new field:

> We donate to them on Wednesdays and Friday and try to have at least a full bin of vegetables, sometimes more than that. And as much as we can, we'll accommodate requests… And it's cool because it can just be whatever we have extra of; like on Friday, we just had the Thursday pickup; whatever people didn't pick up, we can toss it in there…It's a cool thing, definitely. (Participant 5)

In addition, food items were left over after most Sunday pickups, and staff members worked to ensure that they were not wasted. From my experience, the items were generally offered to vendors and volunteers, and, when appropriate, boxes or bins of foods were created for specific people or the aforementioned organizations. Moreover, at the end of the growing season, the remaining crops were harvested and donated. On harvest days, volunteers could also take home vegetables that were edible but were not aesthetically suitable for the share or the market.

So, although Sweetwater needed to care primarily for its paid members and for the long-term well-being of the farm, donations occurred on a regular basis, and staff members were exploring other ways to distribute foods to people in need.

When asked about existing or potential steps to increase access of organic foods to low-income individuals, four interviewees referenced—aside from outright donations to other organization—the opportunity to work, either at Sweetwater or at other farms:

> I've seen communities where people organize, and they do gleaning in the fields; and a lot of times, a farmer couldn't sell a crop and can't really afford to harvest it because they don't have anywhere to sell it, so they allow people to come in and glean the crop, basically harvest it themselves and take it. (Participant 6)

Another individual promoted the opportunity to volunteer at farms and receive foods in return:

> Farms always need workers. If you're willing to put in a day of work and actually work, then what farm is going to say no to that and not just give you a few vegetables, or at least feed you while you're there? (Participant 5)

Providing food and memberships directly to individuals with low incomes (n = 4) and expanding food stamp programs to allow for the purchasing of organic, local foods (n = 3) were among the other possible steps mentioned by interviewees. Staff members agreed that increasing access was a necessary and laudable goal, and the CSA model facilitated a certain amount of donations. However, there was an apparent tension between what was ideal and what was actually feasible. As one participant explained, the best solution may be to get "[people] growing food in their neighborhoods" (e.g., through community gardens). After all, farms and farmers are trying to survive themselves:

> The problem is [farmers] have to earn a living. It takes a lot of time to grow food, and it's not really something you can do as charity work because you do need to run the farm, and you need to be able to eat yourself. (Participant 7)

Agriculture in an ideal world. I asked each participant about what they believed agriculture in a *perfect* or *ideal* world would look like. Responses varied slightly, but, in general, participants stated that while some degree of exporting was probably needed, most food production would involve sustainable practices and be at the backyard, neighborhood, local, or regional levels. This response represents the answers well:

> Most people would be growing their own food, and then of course there would maybe be some bigger farms that would grow food on a more commodity basis, and as much as it could would be grown locally, at least regionally, and then things would be shipped through vehicles using renewable energy to get to the next place. And there'd be a lot less waste in the food, and everything would be organic and even beyond organic…We'd be developing ecosystems or agricultural systems that mimic ecosystems, and it would be building the soil at the same time as it was feeding us; and of course things would be distributed locally as much as it could. (Participant 7)

Agriculture in the future, real world. When asked about how agriculture will be *ten years from now* or into the foreseeable future, interviewees' responses and attitudes again differed. Nevertheless, they agreed that—while conventional, large-scale agriculture would persist—organic and local agriculture would continue to grow in influence and availability, as would public knowledge about sustainable practices. However, the extent of this growth was perceived to be primarily dependent on people taking action and demanding a better form of agriculture (n = 4):

> [Political] decisions can exert a lot of pressure and influence markets, but I think in the end, it's what people want; and if people have the courage and have the guts and can really stand their ground and make choices, it can have an incredible effect. But I'm uncertain if that critical mass will materialize or not. (Participant 1)

Summary of interview results. To briefly summarize, interviewees readily acknowledged that organic agriculture and community supported agriculture possessed limitations and variation in form, but they also lauded the benefits that each offered. Regardless of the labels (e.g., organic, permaculture) or the form (e.g., community supported agriculture, community gardens), staff members ultimately wanted individuals to connect with, learn about, and value nature and foods and to share their beneficial experiences with other people. One interviewee stated the case eloquently:

> I think we all need to become gardeners, and gardeners that care about our earth and care about each other and start planting wholesome seeds within ourselves, within our gardens, within our communities, and yeah, that's what it's about; that's what life's about—planting wholesome seeds and watering them, or watering the wholesome seeds that we planted. (Participant 7)

CSA Member Survey Results

Survey demographics. Of the 51 participants who provided their gender, 40 (78.43%) were females (Table 4.1). Fifteen people (28.8%) were in their first year of

membership. The majority of participants possessed either a bachelor's degree (n = 25, 47.2%) or a master's degree (n = 15, 28.3%). Eight others had a professional degree (n = 5, 9.4%) or a doctoral degree (n = 3, 5.7%). Thus, the sample was generally well-educated. Overall, the demographics mirrored those of other studies and underscored a need for greater diversity among CSA members (Curtis, 2011; Oberholtzer, 2004).

Table 4.1

Survey Demographics

Question	Frequency (n)	%
Gender		
Male	11	21.6
Female	40	78.4
For how many seasons (including this one) have you been a member at Sweetwater?		
1	15	28.8
2	11	21.2
3	10	19.2
4	8	15.4
5+	8	15.4
What is the highest level of education you have completed?		
Some high school	0	0.0
High school diploma	1	1.9
Some college	1	1.9
Associate degree	3	5.7
Bachelor's degree	25	47.2
Master's degree	15	28.3
Doctoral degree	3	5.7
Professional degree	5	9.4
Other	0	0.0

Descriptive statistics. CSA members were asked to indicate whether particular aspects of foods were important considerations for them when buying items. For five of the nine aspects, the percentage of *yes* responses was 96.2% or greater (Table 4.1); for *freshness* and *taste*, every participant selected *yes* without exception.

Notably, *shelf life* and *convenience of preparation* were viewed as the least important attributes, a result consistent with the staff interviews. Since CSA membership requires greater time and effort for food preparation and storage, it makes sense that members would view the two qualities as unimportant.

Over 73% of participants—a high proportion but smaller than for six other aspects— believed that *ethical and political considerations* were significant—perhaps a reflection of the health-related motivations cited by interviewees. Nearly 14% were *unsure*, and, thus, may have been confused by the wording of the survey.

Table 4.2

Is [Aspect] an Important Consideration for You When Buying Foods?

Aspect	Yes Frequency (n)	%	No Frequency (n)	%	Unsure Frequency (n)	%
Price	41	77.4	11	20.8	1	1.9
Freshness	53	100.0	0	0.0	0	0.0
Shelf Life	36	67.9	16	30.2	1	1.9
Taste	53	100.0	0	0.0	0	0.0
Convenience of Preparation	22	41.5	31	58.5	0	0.0
Knowing the Food Source	51	98.1	0	0.0	1	1.9
Amount of Nutrients	52	98.1	1	1.9	0	0.0
Amount of Chemicals	51	96.2	1	1.9	1	1.9
Ethical and Political Considerations	39	73.6	7	13.2	7	13.2

Next, survey participants were given the USDA definition of organic and asked whether—for each of the aspects—organic foods, non-organic foods, or neither was *superior* (USDA Agricultural Marketing Service, 2010). The term *superior* may have been confusing for some individuals, but as expected, respondents generally preferred organic foods (Table 4.2).

Of the nine qualities, *price* was the only one for which *non-organic* was selected with substantial frequency. However, a larger percentage of CSA members still chose

organic as being better for price. While this result could be attributed to an undivided loyalty to organic agriculture, one individual provided an insightful response to the open-ended question, stating—much like the interviewees—that the long-term costs of conventional agriculture were greater: "The price for organic food may seem higher, but there are hidden costs in nonorganic foods. When these are taken into account, the price for organic food is better." Therefore, instead of frivolously following a trend, a certain number of CSA members seem to have thoughtful views about organic agriculture.

Moreover, the vast majority of CSA members concurred with staff that organic foods were tastier and more nutritious.

Table 4.3

Which Type of Food Is Superior With Regard to [Aspect]?

	Organic		Non-Organic		Neither		Unsure	
Aspect	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Price	21	39.6	18	34.0	7	13.2	7	13.2
Freshness	35	66	0	0.0	12	22.6	8	11.3
Shelf Life	20	37.7	9	17.0	8	15.1	18	30.2
Taste	48	90.6	0	0.0	4	7.5	1	1.9
Convenience of Preparation	12	22.6	0	0.0	39	73.6	1	1.9
Knowing the Food Source	48	90.6	0	0.0	4	7.5	1	1.9
Amount of Nutrients	46	86.8	1	1.9	6	11.3	1	1.9
Amount of Chemicals	47	92.2	4	7.8	0	0.0	0	0.0
Ethical and Political Considerations	41	80.4	0	0.0	6	11.8	4	7.8

Lastly, participants were questioned about whether or not the CSA model provided satisfactory results for each of the aspects of foods. The results were overwhelmingly positive (Table 4.3). Respondents unanimously agreed that the model was pleasing for *taste, freshness*, and *knowing the food source*; for three other qualities—

amount of chemicals, *amount of nutrients*, and *ethical and political considerations*, the percentages of *yes* responses were greater than 90.

Not surprisingly, *convenience of preparation* and *shelf life* were the two qualities for which the CSA model was least satisfactory. However, for these two aspects, more

Table 4.4

In General, Is Community Supported Agriculture a Model That Provides Satisfactory Results for Members With Regard to [Aspect]?

Aspect	Yes		No		Unsure	
	Frequency (n)	%	Frequency (n)	%	Frequency (n)	%
Price	43	84.3	3	5.9	5	9.8
Freshness	51	100.0	0	0.0	0	0.0
Shelf Life	38	74.5	4	7.8	9	17.6
Taste	53	100.0	0	0.0	0	0.0
Convenience of Preparation	26	51.0	7	13.7	18	35.3
Knowing the Food Source	51	100.0	0	0.0	0	0.0
Amount of Nutrients	47	92.2	1	2.0	3	5.9
Amount of Chemicals	49	96.1	1	2.0	1	2.0
Ethical and Political Considerations	46	90.2	0	0.0	5	9.8

However, for these two aspects, more respondents selected *unsure* than *no***,** possibly because even though the CSA model did not perform well, the qualities were not considered important enough for it to matter; in other words, members seemingly recognized but did not mind the challenges that the CSA model posed for cooking and storage.

Overall, the survey results were consistent with the impressions of the staff: Sweetwater's members—or at least those who participated—were happy with their experiences at the farm. One participant's open-ended response was clear and supported what was communicated by interviewees:

> Community supported agriculture is one of the greatest things I have discovered. It really allows a person to connect with the earth, other people, and the farmers

> who grow your food. Since becoming a member of a CSA I have tried so many new (and delicious) foods. Every week is a new opportunity to try new recipes. I also love the sense of community that being a member provides me with.

Chi-square tests. In my judgment, the sample size for males (n = 11) was too small to dependably perform group comparisons by gender. Nevertheless, chi-square tests were run comparing the responses of the following groups on each of the 27 close-ended questions: online survey participants (n = 25) versus in-person survey participants (n = 28); members in their first or second year (n = 26) versus those who had been members longer (n = 26); and participants with a bachelor's degree or lower (n = 30) versus those with either a master's, doctoral, or professional degree (n = 23). To be clear, the divisions were based not only on intuitive logic but also on the statistical need to maximize sample sizes. Moreover, the tests were run both with *unsure* responses included and with them excluded. To reiterate, after corrections, none of the tests produced, statistically significant results (see Appendix A for noteworthy statistics and cross tabulations). Also, the expected frequencies for most tests were too low.

Participant Observation Results

Many of the insights gleaned from my participation at the farm were woven into the previous sections concerning interview and survey results. Nevertheless, before proceeding to a description of a typical Sunday during the growing season and making a final experience-based argument, one point warrants mention: While the sample size of the interviews was small and insufficient to reach saturation or be generalizable, the perspectives provided, especially those related to community supported agriculture, should not be considered aberrant either. Having spent hundreds of hours fully participating in myriad farm activities and interacting with other visitors, I can

confidently affirm much of what staff members shared with me, and I know that—though there obviously was some variation—other people shared their views as well.

From the occasional and inevitable drama and complaining to the many contented farm visitors who were there to learn, socialize, be outdoors, acquire community service hours, or perhaps gaze at a farm for the first time, I was a witness to it all. Much like interviewees, I observed connections happening; I listened and joined in conversations that ranged from superficial to profound to information-centered. (Meaningful conversations were remarkably common.) I heard children asking to help with the harvest, and I saw them joyfully eating raw vegetables or simply running around and enjoying the farm atmosphere. I watched and participated in the transformation of Sweetwater's new field, which involved countless hours of clearing debris, digging trenches, installing irrigation, composting, tilling, planting cover crop, and the like.

In short, while people could reasonably disagree about the extent of what occurred at the farm, they could not argue about the events themselves. Many people took advantage of the opportunity to connect with and learn about their food, farmers, each other, and the environment. I was one of those people.

Sundays at Sweetwater. During the growing season, Sundays were bustling at the farm. Early in the morning, staff members fed the chickens, pig, and farm cat. (These animals, as a side note, were primarily for educational purposes. Apart from a small supply of eggs, they were not a food source.) Volunteers, with the number varying greatly from one Sunday to the next, arrived around 8:30am. The covered washing area was cleaned and prepared; chairs were lined up in front of the music stage; if weather permitted, sound equipment was set up; the pickup area was organized and rid of leaves;

and bins were gathered for the harvest. Local vendors arrived and prepared for the Sunday Market, scheduled to begin at noon. Often, the volunteers were CSA members, students in need of service hours, or college and community groups; sometimes, as one interviewee explained, people came to learn about growing food or to just relish the farm experience.

At approximately 9am, the workers typically traveled by automobile to a nearby field, but, on occasion, the harvest—or at least a portion of it—occurred at one of the smaller fields at Sweetwater's main location. Staff members provided instructions, as needed, and people formed into groups. During the 2011-2012 growing season, enough food was amassed on Sundays for about 150 members. Staff members and volunteers interacted as they harvested in the fields.

Individuals also socialized in the wash area, where food items were emptied into tubs and subsequently cleaned and readied for either the CSA share or, less frequently, the market. After drying, items were loaded back into bins and placed either in the cooler or the in the main barn for pickup. Enough of each item had to be ready by the noon start time.

The Sunday Market commenced around 12, and visitors browsed the diverse array of local products. Patrons commonly included those people who had been harvesting or washing, as—except for on abnormally busy Sundays—the work usually lessened in the afternoon. Staff members monitored the supply of foods, and if an item was running out, workers went back to the fields to acquire either more of the same crop or a suitable replacement.

On the stage, musicians produced dulcet sounds for audiences. Educational workshops were regularly hosted, with topics including permaculture, herbs, and composting, among many others. Yoga classes were frequent as well.

At four o'clock, the market and CSA pickup both ended, and everything was broken down and placed back in its proper storage location. As discussed earlier, any extra food was donated to the appropriate individuals or organizations.

Organic farming is unpredictable. During my time at Sweetwater, the rezoning crisis and the necessary move to a new field—both of which were discussed previously—were clearly the most impactful events that occurred, forcing the farm into a period of uncertainty (Mariani, 2011). Nevertheless, other challenges emerged with regularity.

Tractors and other equipment broke down; aphids, mole crickets, and various critters wreaked havoc; torrential rains obstructed paths, destroyed plants, eroded compost piles, and—in one instance—rendered a field inoperative for several weeks; and early frosts extinguished tomato plants, among others.

Moreover while Sweetwater generally benefited from the magnanimity of supporters—receiving an astonishing amount of donations—two instances occurred which were dismaying. First, one night, individuals (or someone) dumped glass and other trash at the edge of the new field; they also stole a tent. In a separate incident and at a different location, burglars temporarily ruined the irrigation system.

Although such dramatic occurrences were rare, the simple point is this: Farming is inherently unpredictable and perilous. With the help of the community, staff members managed to skillfully overcome the challenges that Sweetwater encountered. However, this was neither easy nor without adjustments.

Chapter 5: Discussion

Comparing Results Against the Literature

Overall, the insights shared by participants were congruent with the results of previous studies. Nevertheless, being an in-depth ethnographic study, there were nuances that warrant discussion in this chapter.

Staff members' definitions of *organic*. Interviewees viewed *organic* neither as the absence of chemicals nor as an all-or-nothing endeavor. Rather, it was perceived to be a holistic set of practices, including but not limited to building the soil. Sustainability was said to fall along a continuum, with a closed system being the ideal scenario. While the USDA definition was regarded as better than nothing, it was considered largely inadequate (National Archives and Records Administration, 2012). As noted in Chapter 2, similar beliefs were evident in earlier research (Chrzan, 2010; DeLind, 2000; Kloppenburg et al., 2000).

In practical terms, these perceptions are a reflection of the diversity of organic agriculture. Scholars need to recognize that there are differences—to use a dramatic example—between small-scale organic, permaculture farms and large-scale monoculture farms that are not committed to the movement but are abiding by organic standards (Buck et al., 1997; Guthman, 2004). Until researchers themselves can sufficiently and systematically define the term *organic*, comparisons of the two forms of agriculture will continue to be problematic.

Perceived benefits of organic farming and foods. According to the literature, interviewees were correct in their evaluation of farmers' motives for adopting organic practices, mentioning the environment, human health, and financial profits (Best, 2010; Darnhofer et al., 2005; Fairweather, 1999; Läpple & Rensburg, 2011; Lockie & Halpin, 2005; Padel, 2001; Rezvanfar et al., 2011). Their impression of consumers' motivations as primarily health-related also appears to be accurate (Hughner et al., 2007; Shepherd et al., 2005). Given this, it seems that farmers—at least at Sweetwater—do not erroneously believe that all customers share their social and environmental concerns.

Moreover, the results of the CSA member surveys closely resembled those yielded by Torjusen et al. (2001). While freshness and taste were deemed the most important qualities of food, political and ethical considerations were still valued by the majority of respondents. Thus, marketing for organic and local foods should initially target consumer priorities of taste, freshness, and health but should not ignore other factors (Hughner et al., 2007; Schifferstein & Oude Ophuis, 1998; Shepherd et al., 2005).

Almost 87% of participating CSA members held that organic foods were better with regard to the amount of nutrients, a perception neither sufficiently supported nor rejected by the literature (Dangour et al., 2010; Smith-Spangler et al., 2012; Williams, 2002). Nevertheless, consumers cannot wait for science—with its proclivity for conservatism—to generate convincing results. Rather, they must use their judgment to make the best decisions they can for their families and themselves.

Benefits and barriers to the CSA model. Not surprisingly, receiving advanced payments from members was considered a major advantage by staff members (Cone & Myhre, 2000; Perez et al., 2004). Even so, interviewees noted that by receiving funds in

such a manner, much was expected in terms of consistency and quality of food items. Thus, it also presented a challenge.

For members, obtaining fresh and tasty foods from a trusted source was a main benefit, as indicated in both the surveys and interviews, as well as in the literature (Cooley & Lass, 1998; Durrenberger, 2002; Goland, 2002). Staff members also spoke extensively about the social benefits of community supported agriculture for all parties involved. This benefit is deserving of additional examination, as earlier studies highlighted some members' relative lack of interest in building community (Cone & Kakaliouras, 1995; Cone & Myhre, 2000; DeLind, 1999; Durrenberger, 2002; Farnsworth, 1996; Landis et al., 2010; Oberholtzer, 2004; Polimeni et al., 2011).

On this subject, at least two questions warrant answers. First, do farms like Sweetwater—which hosts a Sunday market—have added, community-related advantages, apart from the CSA model itself? Sweetwater's CSA members are not limited to volunteering and picking up their share; rather, they can attend the market and enjoy the music, workshops, vendors, market patrons, and other offerings that are not necessary components of the CSA model. Researchers need to explore whether or not such events create community and to what extent.

Second, even if CSA members rate community as less important than other factors, does this mean that the model does not facilitate connections among people? Or, are members simply unaware of the potential social benefits? As I experienced and witnessed myself—and as explained by interviewees—once people visit farms for the first time, their expectations may be exceeded, and their priorities may change (Polimeni,

2006). By publicizing accounts from experienced, committed members and volunteers, CSA farms may increase participation and awareness of the community benefits.

Challenges for organic agriculture. Like some scholars, staff members expressed discontentment with the unequal balance of power in favor of conventional agriculture and large corporations (Buck et al., 1997; Guthman, 2004). Though they recognized the growing popularity of organic agriculture, interviewees viewed the future with some uncertainty (Vilsack, 2012). Still, as they explained, they were not being idle, waiting for disasters to strike; instead, they were working and taking small steps toward improving the food system. Rather than relying heavily on theoretical arguments (i.e., political economy), scholars should elicit and provide more access to quotations from farmers and advocates themselves, as organic and alternative agriculture are exceptional examples of exercising agency and posing resistance—however formidable (Hendrickson & Hefferman, 2002).

Produce consumption. Alarmingly low numbers of children and adults in the United States are eating the recommended amounts of fruits and vegetables (Krebs-Smith et al., 1996; Guenther, Dodd, Reedy, & Krebs-Smith, 2006). Among students, interventions designed to reverse this unfortunate trend have produced encouraging results by altering food environments (Cullen et al., 2007; Hermann et al., 2006; McAleese, 2007; Parmer, Salisbury-Glennon, Shannon, & Struempler, 2009). For example, school gardens—which expose children to foods and enable teachers to model healthy behaviors—have been linked to increased consumption of produce (Hermann et al., 2006; McAleese, 2007; Parmer et al., 2009).

Based on participants' responses, social cognitive theory (SCT), the literature, and my own observations, there is reason to believe that involvement in community supported agriculture may similarly impact children and adults and encourage them to adopt healthier diets (Andreatta et al., 2008; Bandura, 2004; Cohen et al., 2012; Landis et al., 2010; MacMillen, et al., 2012; McAlister et al., 2008; Oberholtzer, 2004; Russell & Zepeda, 2008). CSAs offer socially supportive environments where observational learning can occur and a wide variety of fresh, healthy foods are readily available. Therefore, CSAs may be assets to public health and its practitioners.

Food access. Akin to many other CSAs, Sweetwater has labored to ensure that its partnering organization has received food and that the surplus items have not been wasted (Guthman et al., 2006; Lass et al., 2003; Perez et al., 2004; Wells et al., 1999; Woods et al., 2009); oftentimes, the leftover food has been donated to food banks, volunteers, vendors, and various people in need. Moreover, staff members have contemplated other ways to increase access for low-income individuals.

Nevertheless, interviewees also implied or explicitly stated that farming was too precarious and not profitable enough to empower farmers to give away an abundance of food—even if it was a laudable goal. Upholding commitments to members and caring for the survival of the farm were necessarily the main priorities. These perspectives have been echoed by participants in other studies (Guthman et al., 2006; Pilgeram, 2011). For example, Guthman and colleagues (2006) interviewed CSA managers (and farmers' market managers) in California and discovered that sizable percentages of CSAs were concerned about food access, had taken steps to make foods more available, and were willing to try new measures. Unfortunately, the CSAs, which did not benefit from

government entitlement programs (e.g., food stamps), generally relied on donating excess foods, altered payment plans, and on the willingness of CSA members to fund subsidies. The CSAs could not be substantial sources of charity, as their staffs had to tirelessly toil just to keep the farms financially viable and to earn living wages themselves (Guthman et al., 2006). Thus, while the donations made possible by the CSA model should not be ignored, it is unreasonable to expect farmers, regardless of the marketing strategies and farming practices they employ, to significantly address problems of food insecurity.

The cost of food. Before food-related problems can be meaningfully addressed, an important question needs to be answered: Who should pay for the solutions? Clearly, the food system (or systems) is in disrepair. Migrant farmworkers are being exploited (Holmes, 2007; Benson, 2008); white, US-born, highly educated farmers are struggling themselves (Guthman et al., 2006; Pilgeram, 2011); and obesity and food insecurity simultaneously persist (Coleman-Jensen, Nord, Andrews, & Carlson, 2012; Ogden & Carroll, 2010; Ogden et al., 2006). While altering farm policies and subsidizing more fruits, vegetables, and organic products would improve the situation, a shift in consumer attitudes toward food is also needed (Environmental Working Group, 2012; Pollan, 2008).

According to interviewees, many consumers are willing to spend extra money on, for example, technology, medical care, and fashion in order to obtain a high-quality product. Yet they undervalue food and frequently opt for cheap, unhealthy options. Although price is a legitimate consideration—particularly for low-income and food-insecure individuals who are unable to afford healthy food—changes are necessary, and somebody must pay for them (Glanz, Basil, Maibach, Goldberg, & Snyder, 1998; French,

2003; Coleman-Jensen et al., 2012). As noted above, farmers themselves are not an option.

Theory Revisited

Political economy. Much like previous studies, the results of this research indicate that for both farmers and consumers involved with organic and community supported agriculture, immediate monetary concerns are sometimes secondary to considerations of health, the environment, quality, education, and so forth (Cone & Kakaliouras, 1995; Curtis, 2011; DeLind & Ferguson, 1999; Durrenberger, 2002; Fairweather, 1999; Farnsworth et al., 1996; Läpple & Rensburg, 2011; Oberholtzer, 2004; Polimeni, 2011; Wells & Gradwell, 2000). Therefore, while interviewees echoed scholars' worries about the *conventionalization* of organic agriculture and acknowledged that price was a barrier to buying organic foods, the research, on the whole, revealed a commitment to non-economic pursuits and ideologies (Buck et al., 1997; Curtis, 2011; Farr-Wharton et al., 2012; Guthman, 2004; Hughner et al., 2007; Landis et al., 2010; Lockie et al., 2002; Magnusson et al., 2001; Oberholtzer, 2004; Polimeni et al., 2011; Roddy et al., 1994; Tregear at al., 1994; Zanoli & Naspetti, 2002).

As made clear by the results and literature, organic and community supported agriculture simultaneously underscore the unmatched power of large, profit-oriented corporations and the diminutive but rapidly growing resistance to such entities (Buck et al., 1997; Guthman, 2004; Hendrickson & Hefferman, 2002; Vilsack, 2012). Thus, to reiterate, political economy is well-suited to studies of alternative agriculture, as it emphasizes corporate dominance while still recognizing the role of human agency and resistance (Erickson & Murphy, 2008; Fine, 1994; Singer & Baer, 1995). Nevertheless,

more scholars should examine—through the lens of organic and community supported agriculture—whether such agency is given enough weight by the theory and whether or not more people are in agreement with the words of my interviewee: “It’s more ideological than business” (Participant 6).

Social ecological model. Scholars have argued that helping to advance community food systems, of which CSAs are a part, can have impacts at multiple levels and ultimately mitigate public health problems such as obesity and food insecurity (Mader & Busse, 2011; O’Kane, 2012). The five levels according to social ecological model are as follows: individual, interpersonal, organizational, community, and societal (McLeroy et al., 1988).

This research supports such assertions. CSAs are organizations that can influence, and are influenced by, policies; they may have a symbiotic relationship with their community—receiving generous donations but also reciprocating by hosting events, giving away foods, and so forth (Guthman, Morris, & Allen, 2006; Lass et al., 2003; Perez et al., 2004; Wells et al., 1999; Woods et al., 2009). They also facilitate social interactions among, as well learning from, people. Finally, while more quantitative research is needed, participation in community supported agriculture may result in changes in individual attitudes, knowledge, priorities, and eating habits (Andreatta et al., 2008; Cohen et al., 2012; Cone and Myhre, 2000; Cox et al., 2008; Landis et al., 2010; MacMillen et al., 2012; Oberholtzer, 2004; Polimeni et al., 2011; Russell & Zepeda, 2008; Schnell, 2007). In short, public health professionals must take into account both distal (i.e., macro) and proximal (i.e., micro) factors in their battles against food-related health issues; food production and distribution should not be ignored.

Social cognitive theory. Social cognitive theory (SCT) possesses several constructs (e.g., observational learning and facilitation) and spans multiple levels of the social ecological model. The theory may help explain the events that occur at CSA farms—places where adults and children are inundated with opportunities to learn from conversations and activities (Bandura, 2004; McAlister, Perry, & Parcel, 2008).

Directions for Future Research

As relatively recent developments, understandings of both organic and community supported agriculture are lacking, and there are countless questions that remain to be answered. Nevertheless, going forward, researchers should endeavor to achieve at least these two goals: (1) obtain more information on the heterogeneity of organic agriculture and seek to establish fairer comparisons between organic and conventional production, and (2) utilize longitudinal designs to analyze how changes occur over time. Studies of crop yields and the nutritional content of organic foods, for example, cannot be considered valid until the first aim, though ambitious, is accomplished (Seufert et al., 2012; Williams, 2002).

More longitudinal designs should be employed to study changes in knowledge, beliefs, and attitudes among CSA members, including children. Pre- versus end-of-season differences in social support and eating habits should also be assessed.

As this research illustrates, the community supported agriculture model is appropriate for examining and furthering understandings of consumer behaviors and thought processes. Members frequently purchased shares and either did not come to pick them up or did not fully understand what they were buying. Future studies of community supported agriculture should go beyond viewing members as rational decision makers

who weigh the costs and benefits and instead should explore the impulsivity or forethought that underlies initial decisions to participate.

Moreover, to reiterate, the voices of participants themselves need to be more evident in scholarly writings about organic agriculture. Additional studies also need to be carried out in places such as Florida, where organic agriculture is still in developmental stages.

Limitations

One overarching characteristic of my research was both a strongpoint and a limitation. In particular, all of the study activities occurred at Sweetwater, thereby enabling me to acquire a more complete and complex understanding of farm activities. If I had not spent so much time participating and observing, meaningful occurrences would have been missed.

Nevertheless, it cannot be assumed that other farms are analogous to Sweetwater. Farming requires the cooperation of nature, as well as diverse knowledge, resources, and skillsets. Consequently, CSA members' experiences, opportunities and levels of satisfaction vary across CSAs (Goland, 2002; Lang, 2006; Oberholtzer, 2004; Schnell, 2007). Collecting data from multiple sites would have had its drawbacks, but it also would have enabled me to capture more variation.

Importantly, due to the previously mentioned field move and rezoning situation, as well as the decision of a partnering farm to no longer provide food for the share, the 2011-2012 growing season was one of the most difficult seasons ever for the farm, as the number of shares had to be reduced from 300 to 200, and the number of weekly items also decreased (Mariani, 2011). Hence, on one hand, I was given the exceptional

opportunity to observe firsthand the unique challenges facing farmers and their supporters and to watch the gradual development of a new field. On the other hand, the 2011-2012 season was not a normal season at Sweetwater, and, thus, the results should only be evaluated with that taken into account.

Interview limitations. The chief limitation of the interviews was the small sample size, as data saturation was not reached. Moreover, as is typically the case with interviews, those who chose to participate were likely different (e.g., had stronger opinions) than those people who did not. Nevertheless, the viewpoints elicited were varied and insightful, and the purposes of the exploratory study were met with success. In addition, as explained previously, the views—while not generalizable from a traditional methodological perspective—were frequently communicated by other farm visitors and, thus, were not atypical.

Survey limitations. There were three primary limitations of the surveys. First, only 53 of the estimated 300 members participated, and it is likely that response bias was introduced. However, such bias can often lead to the disproportionate participation of people with both strongly positive and strongly negative perceptions—not just the former. Thus, while the possibility of bias cannot be disregarded, the overwhelmingly positive feedback provided by participating members was still encouraging.

Secondly, the sample size—while large enough to calculate descriptive statistics and reach basic conclusions—was too small to reliably perform statistical comparisons of groups. The cross tabulations and chi-squares referenced earlier were interesting and noteworthy, but, in statistical terms, the observed differences may have been the result of pure chance or of confounding variables (see Appendix A).

Lastly, the cross-sectional design was problematic, particularly given that Sweetwater was going through a trying time. Ideally, members would have been surveyed at least twice: once before the growing season and once after.

Participant observation limitations. Overall, the participant observation was a strength of the research. Nevertheless, since I was engaged in various farm activities, I was unable to record field notes immediately; consequently, I may have failed to include important information. Also, although my experiences were valuable in and of themselves, I only recorded detailed notes for visits from June to December of 2011.

Conclusions

Using a mixed-methods approach, I aimed to understand the daily operations at Sweetwater as well as the perceptions of staff and CSA members. The latter were overwhelmingly satisfied with their experiences with the CSA model and at Sweetwater. They also favored organic foods and unanimously valued taste and freshness. In interviews, staff members extoled the many advantages of organic farming. Moreover, while they were cognizant of the challenges associated with the CSA model, they also noted countless benefits, including the opportunity to connect to your food, farmers, environment, and community. The perceptions of interviewees were consistent with the literature and with my own invaluable experiences at the farm. Future research should aim to establish more valid and systematic comparisons between organic and conventional agriculture. Moreover, more longitudinal designs should be utilized to analyze changes in social support, food system knowledge, and eating habits.

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Appendix A: Noteworthy Chi-Square Results

For this appendix, I have included only the outputs for which at least one statistically significant result was yielded ($p < .05$).

Statistical Differences by Survey Type

Table A.1

Chi-Square: CSA Satisfaction and Convenience of Preparation by Survey Type and With Unsure Responses Excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.160	1	.041		
Continuity Correction	2.604	1	.107		
Likelihood Ratio	4.550	1	.033		
Fisher's Exact Test				0.085	0.051
Linear-by-Linear Association	4	1	0.045		
N of Valid Cases	33				

Notes: 2 cells (50.0%) have expected count less than 5. The minimum expected count is 3.39. Therefore, the results cannot be trusted.

Table A.2

Cross Tabulation: CSA and Convenience of Preparation by Survey Type

	In general, is community supported agriculture a model that provides satisfactory results for members with regard to the convenience of preparation?		
	Yes	No	Unsure
Online	15	1	9
In-Person	11	6	9

Appendix A (Continued)

Statistical Differences by Education

Table A.3

Chi-Square: Superiority and Amount of Nutrients by Education and With Unsure Responses Included

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.977	2	.050
Likelihood Ratio	6.537	2	.038
Linear-by-Linear Association	5.852	1	.016
N of Valid Cases	53		

Notes: 4 cells (66.7%) have expected count less than 5. The minimum expected count is .43. Therefore, the results cannot be trusted.

Table A.4

Chi-Square: Superiority and Amount of Nutrients by Education and With Unsure Responses Excluded

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.677	1	.031		
Continuity Correction	2.970	1	.085		
Likelihood Ratio	4.842	1	.028		
Fisher's Exact Test				0.072	0.042
Linear-by-Linear Association	5	1	0.032		
N of Valid Cases	52				

Notes: 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.54. Therefore, the results cannot be trusted.

Table A.5

Cross Tabulation: Superiority and Amount of Nutrients by Education

	Which type of food is superior with regard to the amount of nutrients?			
	Organic	Non-Organic	Neither	Unsure
Bachelor's Degree or Less	29	0	1	0
Master's, Doctoral, or Professional Degree	17	0	5	1

Appendix A (Continued)

Statistical Differences by Year of Membership

Table A.6

Chi-Square: Superiority and Price by Year of Membership and With Unsure Responses Excluded

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.975	2	.031
Likelihood Ratio	7.454	2	.024
Linear-by-Linear Association	6.800	1	.009
N of Valid Cases	45		

Notes: 2 cells (33.3%) have expected count less than 5. The minimum expected count is 3.42. Therefore, the results cannot be trusted.

Table A.7

Cross Tabulation: Superiority and Price by Year of Membership

	Which type of food is superior with regard to price?			
	Organic	Non-Organic	Neither	Unsure
First or Second Season	6	10	6	4
Third Season or More	14	8	1	3

Appendix B: Institutional Review Board Consent Forms and Script

Content from three IRB-approved consent documents is provided here. The first form presented was read and signed by interviewees. The second was shared with survey participants, but signatures were not obtained. Finally, the online script was placed at the beginning of the online survey. A verbal script for the in-person surveys was approved but never used; thus, it is excluded here. The formatting (i.e., margins) of the original versions was slightly altered for this appendix.

Interviewee Consent Form

USF
UNIVERSITY OF
SOUTH FLORIDA

Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study # Pro00003273

We are asking you to take part in a portion of a research study called:

Sweetwater Organic Community Farm: A Case Study of a CSA

Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher to discuss this consent form with you, and please ask him to explain any words or information you do not clearly understand. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed on this form.

Please tell the researcher if you are taking part in another research study.

The person who is in charge of this research study is Philip McNab. This person is called the Principal Investigator. He is being guided in this research by Heide Castañeda, PhD.

The research will be conducted at or near Sweetwater Organic Community Farm.

Purpose of the study

The purpose of this portion of the study is to:

- Find out Sweetwater staff members' and volunteers' perspectives of organic agriculture and community supported agriculture
- Complete thesis and special project requirements for the University of South Florida

Study Procedures

If you take part in this study, you will be asked to:

- Answer questions about organic agriculture and community supported agriculture
- The interview will be conducted at your convenience and can be completed in one or multiple sessions; the interview will take approximately an hour, depending on the length of your answers.
- The interview can be completed at a time and location that is convenient for you. The interview can be completed as soon as you would like, but please read and consider this form carefully before signing and agreeing to start the interview.
- If you give permission, the interviews will be audio recorded; if you do not give permission, notes can be taken by hand. The tapes and resulting electronic documents will be stored in safe locations, and only the researcher, his advisor, and other research staff will have access to them.

Total Number of Participants

About fifteen Sweetwater staff members and volunteers will take part in this portion of study.

Benefits

We are unsure if you will receive any benefits by taking part in this research study.

Risks or Discomfort

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

Compensation

You will receive no payment or other compensation for taking part in this study.

Cost

There will be no additional costs to you as a result of being in this study.

Privacy and Confidentiality

We will keep your study records private and confidential. Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

The research team, including the Principal Investigator, study coordinator, and all other research staff**.**

Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

Any agency of the federal, state, or local government that regulates this research. This includes the Food and Drug Administration (FDA), Florida Department of Health, and the Department of Health and Human Services (DHHS) and the Office for Human Research Protection (OHRP).

The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your real name. We will not publish anything that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Your decision to participate or not to participate will not affect your job status. You also may choose to not answer certain questions or to have any previous answers changed or thrown out.

New information about the study

During the course of this study, we may find more information that could be important to you. This includes information that, once learned, might cause you to change your mind

about being in the study. We will notify you as soon as possible if such information becomes available.

You can get the answers to your questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, or experience an adverse event or unanticipated problem, call Philip McNab at [redacted]. You can also email him ([redacted]) or his advisor, Dr. Heide Castañeda ([redacted]).

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

Appendix B (Continued)

Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

_____ _____

Signature of Person Taking Part in Study Date

_____

Printed Name of Person Taking Part in Study

Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I hereby certify that when this person signs this form, to the best of my knowledge, he/ she understands:

- What the study is about;
- What procedures/interventions/investigational drugs or devices will be used;
- What the potential benefits might be; and
- What the known risks might be.

I can confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in the appropriate language. Additionally, this subject reads well enough to understand this document or, if not, this person is able to hear and understand when the form is read to him or her. This subject does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give legally effective informed consent. This subject is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give informed consent.

_____ _____

Signature of Person Obtaining Informed Consent / Research Authorization Date

_____

Printed Name of Person Obtaining Informed Consent / Research Authorization

Appendix B (Continued)

In-Person Survey Consent Information

IMPORTANT SURVEY INFORMATION

You are being asked to take part in a portion of a research study called:

Sweetwater Organic Community Farm: A Case Study of a CSA

The USF Institutional Review Board (IRB) number for the study is Pro00003273.

The person who is in charge of this research study is Philip McNab. This person is called the Principal Investigator. He is being guided in this research by Heide Castañeda, PhD.

The purpose of this portion of the study is to:

- Find out Sweetwater CSA members' perspectives of organic agriculture and community supported agriculture
- Complete thesis and special project requirements for the University of South Florida

If you take part in this study, you will be asked to:

- Answer questions about organic agriculture and community supported agriculture
- The survey will take approximately five to ten minutes, depending on the speed at which you answer questions.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. If you do choose to take part, you may skip any questions you do not want to answer.

Please only take part in this study if you are at least 18 years of age and if you are or were a member at Sweetwater Farm for the 2010-2011 or the 2011-2012 season. The survey questions are written in English, so please only complete the survey if you are able to understand English well.

We are unsure if you will receive any benefits by taking part in this research study. This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day.

Appendix B (Continued)

The survey is completely anonymous. You will be asked to provide general demographic information, but your name will not be collected.

If you have any questions, concerns or complaints about this study, or experience an adverse event or unanticipated problem, call Philip McNab at [redacted]. You can also email him ([redacted]) or his advisor, Dr. Heide Castañeda ([redacted]).

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

By taking the survey, you are consenting to voluntarily participate in this study; please take it only if you understand the study and understand that participation is voluntary. Please remove this page and keep it for your records.

Online Consent Script

You are being asked to take part in a portion of a research study called:

Sweetwater Organic Community Farm: A Case Study of a CSA

The USF Institutional Review Board (IRB) number for the study is Pro00003273.

The person who is in charge of this research study is Philip McNab. This person is called the Principal Investigator. He is being guided in this research by Heide Castañeda, PhD.

The purpose of this portion of the study is to:

- Find out Sweetwater CSA members' perspectives of organic agriculture and community supported agriculture
- Complete thesis and special project requirements for the University of South Florida

If you take part in this study, you will be asked to:

- Answer questions about organic agriculture and community supported agriculture

- The online survey will take approximately five to ten minutes, depending on the speed at which you answer questions.

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. If you do choose to take part, you may skip any questions you do not want to answer.

Please only take part in this study if you are at least 18 years of age and if you are or were a member at Sweetwater Farm for the 2010-2011 or the 2011-2012 season. The online survey questions are written in English, so please only complete the survey if you are able to understand English well.

We are unsure if you will receive any benefits by taking part in this research study. This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day.

The online survey is completely anonymous. You will be asked to provide general demographic information, but your name will not be collected.

If you have any questions, concerns or complaints about this study, or experience an adverse event or unanticipated problem, call Philip McNab at [redacted]. You can also email him ([redacted]) or his advisor, Dr. Heide Castañeda ([redacted]).

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

By proceeding to the survey, you are consenting to voluntarily participate in this study; please proceed only if you understand the study and understand that participation is voluntary.