

## Marketing Strategies and Challenges of Small-Scale Organic Producers in Central North Carolina

By: [Susan L. Andreatta](#)

Andreatta, Susan. 2000 "Marketing Strategies and Challenges of Small-Scale Organic Producers in Central North Carolina." Culture and Agriculture. 22(3):40-50.

Made available courtesy of the American Anthropology Association & Wiley-Blackwell:  
<http://dx.doi.org/10.1525/cag.2000.22.3.40>

**\*\*\*Reprinted with permission. No further reproduction is authorized without written permission from the American Anthropology Association & Wiley-Blackwell. This version of the document is not the version of record. Figures and/or pictures may be missing from this format of the document.\*\*\***

### **Abstract:**

This paper describes some of the marketing opportunities available to small-scale, limited-resource organic producers in North Carolina. It examines farmers' markets and community-supported agriculture programs and identifies ways in which growers serve as advocates and educators to get consumers interested in local agriculture and the food they eat. I also discuss the growing demand for locally grown, organic food products in North Carolina and the means by which growers can increase community support for their products. Potentially, small-scale growers could sustain themselves in the face of the farm loss and falling prices for conventional agricultural products by actively pursuing alternative production and niche marketing strategies.

**Keywords:** Agriculture | Marketing | Organic Food | Production | North Carolina | Farming | Community

### **Article:**

Since the 1960s, consumers have demonstrated concern about the environmental impact of extensive herbicide and pesticide use by intensive conventional agriculture. Media reports in the late 1980s and early 1990s alerted consumers to unacceptable pesticide levels on produce, extensive antibiotic and hormone use in animal production, and the prevalence of bio-engineered foods (Estes et al. 1999). One result of this growing consumer awareness has been an increased interest in buying organic food. According to the Organic Trade Association (OTA 1999) "31% of those polled nationwide reported they purchase organic food at least once or twice a month and 85% strongly favor nationwide labeling standards for organic food." The demand for organic food is especially strong among consumers who are concerned not only with food appearance but also with the care taken in its cultivation (Arnold 1998; Hage 1999; Hitt 1999). These consumers buy organic products in part because they believe that they are

indirectly helping to protect the environment, while safeguarding their own health and that of farmworkers.

This consumer demand provides increased opportunities for growers who have resisted participation in the mainstream agro-food system. This resistance has led to alternative production practices, partly to help protect the environment from the adverse effects of intensive, chemical-based agriculture and partly to meet local consumer interest in healthy food. Organic agriculture thus has emerged as an alternative to conventional agricultural production. This practice requires the use of natural products and practices and avoids synthetic inputs such as chemical fertilizers and pesticides, and contaminants such as heavy metals and PCBs (commonly found in municipal sludge). It also has strict guidelines against artificial methods of cultivating or processing food such as irradiation, genetically engineered seeds, animal confinement, antibiotics, or hormones (Long 1999). An "organic grower" is one who follows these principles. A "certified organic grower" has, in addition, been formally certified by an approved agency; a "transitional grower" is not yet eligible for certification but is converting from conventional to organic production. The nationwide growth of organic production is widely documented. In 1995, "there were nearly 4,900 certified organic farms that raised organic food products in 45 U.S. states, a 35 percent increase since 1992" (Estes et al. 1999:4). In 1997, the organic market in the U.S. totaled \$4.5 billion, with a projected increase of over \$6.6 billion in 2000 (OTA 1999). This growth in production and demand for organic products transcends political boundaries. In the United States and Europe, demand increased 20-30 percent annually for nine consecutive years, 1989-1998 (OTA 1999). The European market is similar in size to the U.S. market, and the Japanese market has been estimated at almost \$2 billion (Welsh 1999). It is evident that consumers are contributing to this growth in the industry by their willingness to pay premium prices for organic products. Generally, organic foods tend to cost more than conventional produce at both supermarkets and specialty food stores.

A recent study of North Carolina's organic food industry (Estes et al.1999) indicated that sales of organic products have grown recently to \$5 million annually. However, 85 percent of those products come from other states, most from California (Estes et al.1999). Clearly, there is room for organic and transitional growers in North Carolina to take advantage of this local demand by marketing their organic produce (Yarger 1999).

One consequence of the growing interest in organic production is the creation of more direct linkages between consumers and their food sources, similar to that between farmers and their farms. Such linkages can strengthen the organic food production system by giving consumers a personal stake in the growers' success. A variety of marketing approaches has been used in the past to develop and maintain these relationships. One approach that has been around for decades in many areas of the U.S. is farmers' markets, which are designated locations where growers convene to sell their products on a seasonal, weekly, or daily basis (Gibson 1994). Frequently, farmers' markets impose guidelines for selling local produce, herbs, and plants to maintain quality standards for fresh and value-added products. A less well-known direct marketing approach is known as Community-Supported Agriculture (CSA)— a production and distribution arrangement in which consumers (known as shareholders or subscribers) pre-pay for produce in the off-season and receive fresh produce weekly during the harvest season at predetermined

pick-up locations (Cone and Myhre 2000; DeLind and Harmen-Fackler 1999; Gibson 1994; Grohand McFadden 1997; Kane 1998; Ostrom 1997).

This paper describes some of the marketing opportunities available to small-scale, limited-resource organic producers in North Carolina. It examines farmers' markets and community-supported agriculture programs and identifies ways in which growers serve as advocates and educators to get consumers interested in local agriculture and the food they eat. I also discuss the growing demand for locally grown, organic food products in North Carolina and the means by which growers can increase community support for their products. Potentially, small-scale growers could sustain themselves in the face of the farm loss and falling prices for conventional agricultural products by actively pursuing alternative production and niche marketing strategies.

### **Alternative Agriculture: Organics**

For the past three decades, alternative agricultural growers have responded to external forces by creating and specializing in holistic food production systems that comprise a form of resistance to—and may offer a means of reforming—the conventional food production, distribution, and marketing system (Belasco 1993). This alternative agricultural food system emerged during the 1960s and has increased in complexity over the years. Growers, such as organic and transitional, are now in the position of being farmers, marketers, researchers, and policy advocates (watchdogs). Sustaining the environment for future generations of food providers and maintaining a healthy agricultural food system are central tenets for these growers.

Farmers and consumers are not the only ones involved in advocating organic agricultural practices and food processing. Industry and government have had their hand in attempting to control the process. Since 1989, the organic food industry has attempted to standardize products labeled "organic." Individual states have initiated guidelines and third party certification programs are in place to provide some local level of structure for organic production. In 1990, the U.S. Congress passed the Organic Food Production Act (OFPA), requiring the United States Department of Agriculture (USDA) to develop national standards and a certification program to assure consumers that organically produced products meet a consistent standard, and to facilitate interstate and international commerce in fresh and processed food that is organically produced. However, the organic standards and program mandated by the Act have yet to be approved by Congress.

In December 1997, the USDA released a set of proposed guidelines governing a national program for the production, processing, and distribution of all organic food products, which all states would have to adopt. These proposed regulations provide uniform standards for organic procedures and materials, such as identifying the natural pesticides and fertilizers that can be used in producing fruits and vegetable, livestock and poultry, dairy, and processed foods that are labeled organic. The national program would require individual organic certification programs, now administered by state or private agencies, to be modified when Congress approves the national organic standards. However, approximately 280,000 individuals provided the USDA with feedback concerning the proposed rules, and most comments were critical of the program (Estes et al. 1999). As a result of this intense criticism, the USDA revised the guidelines during 1998 and 1999. If the revised national guidelines are

approved by Congress, state and private certifying agencies will have to abide by federal guidelines and become nationally accredited through USDA (Long 1999), and all growers and processors who label products as organic will have to comply with the national standards or be fined. This Act would establish the first comprehensive national definition of 'Certified Organic' food in the world. Thus, as the organic industry expands, its structure and guidelines continue to get more complex for growers, inspectors, retailers, and consumers (DeLind 2000).

In North Carolina, the Carolina Farm Stewardship Association (CFSA) has supported local organic producers since 1984. CFSA is a private, non-profit organization that provides classes and workshops on organic production and is also responsible for certifying organic growers in the Carolinas. For crops to be certified organic, growers must use only approved materials that will not harm humans, animals, or soil life, develop an organic farm management plan, keep detailed records, and submit to annual inspection. All companies that manufacture organic food products also must follow similarly strict requirements (Long 1999). The CFSA's *Certified Organic Growers' Manual* distinguishes agricultural inputs that are allowed, allowed with restrictions, or prohibited. As previously mentioned, the responsibilities of CFSA will change when the new Federal regulations are released (Barber 1999).

In May 2000, over 100 farms in North Carolina were certified organic, a 100 percent increase since 1998. However, currently there are no means of tracking transitional growers who are not yet certified or growers who at present are not interested in certification but are in full compliance with the organic standards. Thus, the number of organic producers (gardeners and farmers) in North Carolina may be greater than this.

## **Methodology**

This study presents data from 17 organic households (involving 33 full-time growers, mostly married couples), 74 consumers, three produce managers (from a health food coop, a supermarket, and regional upscale grocery store), and the executive director and certification coordinator from the Carolina Farm Stewardship Association. Interviewing a wide range of informants connected with organic food production and consumption helped to facilitate a more holistic understanding of the agriculture and food system, going from seed to plate, in North Carolina. Primary data were collected through participant observation as well as from formal and informal interviews with organic farmers and consumers from the Piedmont region of central North Carolina. The 33 full-time organic growers were formally interviewed in 1998-1999. They constitute ten percent of the listed growers in the Membership Directory of the Carolina Farm Stewardship Association (CFSA 1997). All 33 are registered with CFSA and practice sustainable organic farming, but not all of them are certified "organic" by CFSA. All of the farms were visited informally three or more times during the course of this study. Each of these informal visits lasted 2-4 hours, during which I was able to speak to both husbands and wives independently. All growers provided data on land area under cultivation, crop varieties, income, and marketing.

Five (30 percent) of the 17 farming households were examined more frequently and in greater detail. These five were selected because of their marketing strategies, as well as their past or present experience with CSA (Community-Supported Agriculture) arrangements. Only one currently has a CSA arrangement; the other four have altered their marketing strategies and no

longer rely on a CSA to market their harvest. Data were gathered on-farm on harvest Fridays from the farm household that maintains a CSA arrangement for 28 weeks to record yields and observe market-day preparations. Twenty-three (31 percent) of the 74 consumers studied participated in this CSA arrangement. During the same 28-week period (May 1999 through December 1999), I made weekly visits to engage in informal interviews and participant observation at two Saturday morning farmers' markets (Greensboro Curbside Market and Greensboro Piedmont Triad Farmers' Market) used by the farmers interviewed for this study. The Greensboro Curbside Market is an urban market operating in an enclosed building and catering to an elderly population of growers and consumers, whereas the Piedmont Triad Farmers Market is an open-air market catering to a younger consumer crowd, especially families with young children. The markets serve the Piedmont Triad region (Greensboro, Winston-Salem, and High Point) with a population of nearly 500,000. Each of the 23 consumers who participated in the CSA arrangement was met informally at the Greensboro Curbside farmers' market. Two weeks after receiving their last weekly bag of fresh produce in October 1999, the 23 CSA members were mailed a questionnaire. The response rate to the questionnaire was 70 percent. Some of the data collected from these consumers focused on food consumption, awareness of organics, and CSA membership satisfaction. To determine the level of satisfaction with the CSA share and distribution site, this survey included a five-point Likert scale, with one indicating the lowest and five the highest level of satisfaction (Bernard 1995). A formal, open-ended survey was used to interview 51 consumers who were not CSA members. When permission was given the surveys were tape-recorded and later transcribed for analysis.

### **General Description of North Carolina Organic Farmers**

Although most of the farming households in this study own sizeable landholdings (8-125 acres), they are considered small-scale producers, for they cultivate on average 2 acres. As a result, many of them are not classified as farmers by the North Carolina Department of Agriculture (NCDA) and are not entitled to the subsidies and disaster assistance in the same fashion as registered farmers. To become a registered farmer in North Carolina a grower must maintain a minimum of either ten acres in row crops, five acres in horticulture, or 20 acres in forested land, and must generate an income of \$10,000 annually from the land. Registration entitles them to tax benefits and farm assistance, including emergency aid when disaster strikes. These strict state guidelines on landholding size and income generated preclude a number of the state's small-scale landholders from being considered farmers and, thus, from receiving subsidies, tax breaks, or disaster relief assistance. All of the organic growers were engaged in diversified agroforestry systems in which they raised several varieties of vegetables that were planted alongside perennial fruitbearing trees or bushes and/or livestock (cattle, hogs, chickens, and/or goats). Growers with livestock (53 percent, or 9 households) used composted animal manure as one of their nitrogen fertilizer sources, contributing to a nutrient recycling program on their farms.

Growers planted seeds and transplants for spring and summer crops, and most got a fall crop harvested before the frost. Established growers relied on greenhouses to extend their growing season from seven to 12 months. The majority of the growers (59 percent, or ten households) were successful at planting 30-60 different crop varieties on their small acreage during the year, while others managed ten or fewer varieties in their growing season. A grower who recently downsized from over 50 to 15 crops commented, "Selecting fewer crops during the growing

season allowed us to specialize in those few crops during the planting period, but it also increased our risks." Towards the end of this marketing season, this grower suffered early losses due to a shortage of water and an early cold snap; the combined effects brought an early end to his selling at the market, relative to other growers, who were selling into December 1999. These growers realized that any one of the limited numbers of crops could be affected adversely by something during that season, (e.g., blight, weather, or a drop in market price). Over-all, growers depended on staggered and successional planting to support a diverse polyculture that provided a varied range of commodities throughout the growing season. Ten (59 percent) of the organic growers were netting more than \$10,000 per acre, although no one crop even approximated an acre in production. This is far superior to even the gross earnings per acre received by conventional farmers cultivating monoculture row or horticulture crops (see Table 1).

Smallness has both advantages and disadvantages, forcing small-scale growers to make reticulate decisions on land use, labor, markets, and crop selection. Labor factors heavily into decision-making. Because of the small size of their operations, hiring labor greatly reduces growers' profit margins. In contrast to the larger, conventional growers, who hire migrant laborers to assist in their mechanized farming operations (Barlett 1993; Griffith and Kissam 1995), organic producers in North Carolina farm on small acreages that can be managed by a single household. Fifteen of the households (88 percent) interviewed preferred to rely on what they could manage. Although all growers welcomed volunteered help on their farms, only two were in a position to pay for hired labor during the harvest season, and four relied on unpaid apprentices. Only one used a tractor, another used a horse to plow, and the remaining fifteen (88 percent) relied on small hand tillers to prepare and cultivate their beds. Growers tended to select production practices that would not compact the earth and that would help retain profits on the farm and in the home.

Economics, farming traditions, and the environment all play a role in decisions about what crops to grow and what varieties of seeds to plant. All the growers elected to grow some heirloom seed varieties, partly to preserve heritage seeds and partly to maintain biodiversity on their farms and in the food gene pool. Growers who sold these heirloom varieties as an alternative crop promoted flavor and history. As part of their sales pitch to consumers and chefs, growers publicized their use of heirloom seeds, their organic practices and high-quality food. This brought them higher prices than those charged by other vendors at farmers' markets or local supermarkets. Planting heirloom seeds was not only a way to capitalize on agro-history, it also served as another means of resistance. In other words, growers wanted to be able to save their seed from their harvest for future seasons and did not want to be dependent upon transnational agriculture corporations for hybrid and transgenic seeds that cannot be reused in successive planting seasons (Denison 1999; Lyons and Lawrence 1999).

### **Niche Marketing: The Role of Changing Food Interest**

To be a successful organic grower requires creativity and flexibility in growing and marketing strategy. All of the growers planned their marketing arrangements prior to planting their seeds. Each had a minimum of four different weekly distribution outlets, including direct marketing to consumers (CSAs, farmers' markets, and road-side stands), sales to retail outlets (such as food co-ops, supermarkets, and health food stores), and sales to institutions (restaurants, county clubs,

schools, and hospitals). Small-scale producers, in particular the organic growers in North Carolina, seek markets where they can sell their products directly to the consumer. Thus, they maximize their earnings and supplement their income by selling to chefs at high-end restaurants and food co-ops, where high-quality organic foods can command a premium price.

Organic growers who have developed niche markets for their products have had an influence on local consumers, especially those who, in the past, had shied away from cooking fresh food. Variety and small quantities are more appealing to many of today's consumers than bulk bargains. Products such as cooking herbs, medicinal plants, tea planters (plants whose leaves are steeped in water to make tea or tinctures), and vegetable transplants have encouraged consumers to get re-acquainted with plants and food. At the farmers' markets, I observed growers selling one or two pounds of tomatoes at a time to many consumers; no one purchased a bushel (for canning purposes or otherwise). Similarly, a grower could make more money selling two ounce bags of basil at a dollar each than one-pound bags at eight dollars.

In creating niche markets, 35 percent of the growers (six households) reported that they grew mostly crops that consumers did not have to cook (flowers, lettuces and tomatoes), while others chose to cater to experimental cooks. A number of growers mentioned that they read *Gourmet Magazine* or other popular magazines that offered food recipes, claiming that these recipes helped to influence their crop selection. Growers also pointed out that Martha Stewart has helped to get consumers not only cooking again but also adding garnish (e.g., fresh basil, parsley, and rosemary sprigs) to dishes they serve to others, thereby increasing the sale of the small packets of herbs at the farmers' markets. An organic herb grower commented that she and her husband return home hoarse after spending the day at the market. "People buying herbs always have questions on lighting, water and soils." She added, "By now, almost everyone in town must have one of our rosemary transplants, and they always come back for something else."

In 1999, Asian vegetable dishes and Mediterranean pasta dishes were the predominant culinary themes, fitting well with the quick-cooking recipes on which many households and restaurants have come to depend (Bukvoinsky 2000). In my study, 88 percent (15 households) delivered weekly to restaurants. One couple stated, "We are so fortunate, our chef just calls up and says, 'Bring us what you have.' After working with him so many years, he is not even interested in knowing what we have; he just takes it. We generally know what he wants, and if there is extra, he takes it to make pasta sauces or marinades." Consistent quality and quantity of food helps to build enduring linkages between chefs and growers.

As consumers go in search of the new food items (alternative niche items such as fresh organic produce) their journey frequently takes them to new venues other than supermarkets, such as farmers' markets, and food co-ops. Estes et al. (1999) found in their market study of North Carolina's organic industry that the majority of the organic fresh produce is imported from other states and countries. However, in response to increasing demand, organic workshops are regularly conducted by local agriculture extension agents and CFSA members to encourage North Carolina farmers to make the transition into organics and benefit from the demand for organic products.

## **The Role of Farmers' Markets**

Farmers' markets are an important source of income for the growers in this study. Forty-one percent of the households reported that 75 percent or more of their annual income is derived from direct sales at farmers' markets. Selling at farmers' markets may limit the volume that growers can sell, but they make up for the difference by selling their produce at a higher retail price. Selling and buying locally also contributes to the local economy of the communities in the area where markets are located.

Farmers' markets are an important distribution component in a local agriculture and food system and their vitality can stimulate growth in other sectors of a local agro-food system (Stephenson and Lev 1999). In fact, among all the consumers interviewed 57 percent purchase their fresh produce from farmers' markets in the summer months. Buying local, especially at farmers' markets, helps to support local farmers and keeps food dollars in the local economy.

As both the literature and my own observations indicate, farmers' markets are more than just locations where food is bought and sold. Growers who retail their fresh produce at farmers' markets tend to establish rapport and build friendships with consumers, increasing the opportunity for return sales. Farmers' markets provide a venue that allows a grower to speak with and educate consumers about their farm and growing techniques (Gibson 1994; Hilchey 1995; Hitt 1999). Consumers also interact with growers by asking questions about food preparation and preservation and, whether directly or indirectly, keep growers informed about their food preferences (Bush 1999; Hitt 1999; Stephenson and Lev 1998).

All growers selling at the local farmers' market realize that people will come back if they have a good experience. Thus, they try to ensure that consumers take home a good, tasty product and memories of a good time. The aim is to get visitors returning to the markets, possibly to the same grower, and to encourage consumers to support local growers by eating in season. Farmers' markets are in direct competition with supermarket chains and local food stores, and the competition among growers for customers is formidable—being unique, and yet offering quality produce to attract consumers are only some of the many challenges growers face.

Success in attracting consumers to buy fresh produce on a regular basis is apparent from the crowds that arrive at the Piedmont Triad Farmers' Market each Saturday morning in support of local growers. According to its manager, this market opened in 1995 with 40 registered farmers (conventional and organic). In the market's first year of operation, there were approximately 500,000 visitors. By 1998, the market registered 150 farmers with over a million visitors annually, a 100 percent increase in three years.

The Piedmont Triad Farmers' Market has also worked for the growers to increase the market's visibility. Each week, the manager has activities arranged for the consumers to learn from or participate in. For example, during the blueberry harvest, the manager organized a blueberry festival and at Halloween he arranged a pumpkin festival. The biggest festivals are the two herb sales, one Saturday in the fall and one Saturday in the spring, during these events attendance reaches near 12,000 people. Through such programs, community ties to local agriculture are strengthened because of the market transactions.

## Community-Supported Agriculture

Another means of linking consumers to growers is "Community-Supported Agriculture" (CSA). CSA is not a new concept; it is a production and distribution system that was developed in Europe in the 1960s. For small- and medium-sized growers and limited-resource users, the CSA distribution system provides a direct, supplemental marketing outlet. There are several well-established CSAs in Indiana, Michigan, Minnesota, New York, Ohio, Oregon, and Wisconsin (Cone and Myhre 2000; DeLind 1999; DeLind and Harman-Fackler 1999; Green 1998; Ostrom 1997). In fact, the CSAs in Wisconsin support over 4,000 consumers (MACSAC 1999). CSAs have become increasingly attractive to small-scale specialty crop farmers, such as organic growers, in these regions. In North Carolina however, this remains a relatively underdeveloped market for local organic growers and interested consumers.

Participating in a CSA enables shareholders to share in the responsibility for the food system that nourishes them. This creates a social responsibility toward the people involved directly in food production and an ecological responsibility for stewarding the land. Shareholders pre-pay their fees in early spring, thereby assisting the grower in planning his/her fields and paying for seeds, soil amendments, and other inputs. Members usually pay a few hundred dollars in advance for their weekly share of the fresh produce throughout the growing season. They pick up their harvest shares at the farm or at a centrally located drop-off site. Some growers offer discounts for working shares. These programs are designed for shareholders to work regularly on the farm. CSA members can contribute in other off-farm capacities, such as writing the farm newsletter or distributing the fresh produce bags.

A special aspect of the CSA approach is the opportunity to educate consumers about what it takes to grow fresh produce and to build support for local agriculture and an agrarian community. Shareholders share in the benefits and risks of cultivation, including both the bountiful and the scarce harvests. This arrangement creates a partnership between consumers and growers. Consumers who join a CSA are usually interested in agriculture and want to support local growers and local agrarian economies, but may lack time, land, or experience to farm themselves (Bush 1999; DeLind and Harman-Fackler 1999; Gibson 1994; Kane 1998; Ostrom 1997). Some consumers who purchase organic produce want a more holistic experience with their food consumption, a deeper connection than one based only on a financial transaction. As one shareholder commented on their survey form:

For me as important as preserving the environment without chemicals, is teaching my children about locally available produce: what it means to help our local ecosystem and the benefit that all the food tastes better than any other produce we eat (except our attempts at gardening) is definitely a plus. I feel supporting a CSA is small way to help the environment—the bonus is the great share we receive.

There are no formulas for structuring a community supported farm. Members and growers may share basic ideals of land use and food quality; they may share similar ideals guiding social and economic structures; however, they may only cross paths on the farm or at the distribution sites. Nevertheless, the central philosophy of a CSA is the commitment of shareholders to sharing the risks and benefits of agricultural production with the grower. In general, CSA arrangements

promote the consumption of produce at its nutritional best, minimize the cost of retailing and distribution, and help keep local dollars within the agricultural community. CSA arrangements, coupled with other harvest sales, such as those made at farmers' markets, contribute to an early income, especially during the winter months when growers are limited in what they are able to plant, harvest, and sell.

### **Consumers' and Growers' Expectations from a CSA**

The literature indicates that CSA programs have met with mixed reactions from both growers and consumers (DeLind 1999), especially in the southeastern U.S. (Kane 1998). Kane's research indicates a high turnover rate there among CSA membership, requiring growers to spend time seeking new members (Kane 1998). Kane's results indicate that one of the reasons for the high turnover rates is that consumers want more weekly variety in produce during the summer season.

The CSA examined in this study was a husband and wife team that enrolled 23 consumer households that shared a strong interest in and support for local agricultural products; sixteen households (70 percent) responded to our survey. The average member household size is 2.8, and the majority reported that between 50 and 75 percent of their fresh produce needs were obtained from their CSA membership. Members were asked to choose their top five reasons for joining, from a list of 19 possible reasons. The five most frequently selected were: obtain organic produce (50 percent); obtain locally grown produce (44 percent); obtain fresh produce (38 percent); support a local farmer (31 percent); health/ dietary reasons, environmental concerns and educating family (tied at 19 percent each). Overall, the survey results indicate that shareholders were very satisfied with the quantity received, the quality of the produce (its taste), and the freshness and variety of the produce, as well as with the distribution time and site to collect their CSA share (Table 2). And, even without a farm workday or potluck dinner to complete the harvest season, 88 percent of the members enjoyed the social/community component of being a member of a CSA.

CSA members typically expected a certain variety in the produce they received on a weekly basis, much like the supermarket shopper. A small organic farmer with an acre or two in production has a difficult time consistently providing the quantity and variety of a supermarket, a situation about which growers are trying to educate their consumers. Learning to buy and eat in season is one of the lessons to be learned when participating in a CSA or when shopping regularly at a farmer's market. As several growers commented, "The idea of getting a local ripe tomato in February or spinach in July is rather absurd." However, a shareholder also pointed out, "Being given eggplant four weeks in a row is a culinary challenge, especially if you are not a fan of eggplant or if your repertoire of eggplant recipes is limited." Another commented that, when they had choices other than eggplant or peppers, "they had less excess food;" in other words they ate it as opposed to giving or throwing it away or composting it. In fact, two members commented on the survey that they would be willing to pay more in advance for increased amounts of certain food items. Interestingly, the growers planted 59 different crop varieties on an acre during their growing season, but only 56 percent of their share-holders were "very satisfied" with produce variety (see Table 2).

The lower satisfaction score for variety relative to the other categories is not unlike what Kane (1998) and DeLind and Harman-Fackler (1999) found. However, those authors also found high turnover rates among CSA shareholders. Conversely, the CSA in this study has a very high retention rate (88 percent) and a waiting list, suggesting that shareholders are committed to the growers and are not put off by the limited variety. A shareholder remarked on a survey, "We were surprised and pleased with the homemade bread and small herb packages included in the bags as well as the clean packaging and produce variety." Another added that they were going to join the following year, even if their summer vacation took them away from town for an extended period. Word is spreading that this husband and wife producer team are reliable organic farmers, and they now have a waiting list of 30 new families interested in joining their CSA for 2000. These growers are considering dropping one of the farmers' markets at which they sell at mid-week, so that they can support ten more CSA shareholders.

Commitment to local agriculture and its food system requires an understanding of the multiple risks growers' face environmentally. The year 1999 was a challenge involving an early and long summer that included a drought and concluded with several heavy rains from hurricanes on the one hand, and slow fall germination from an early cold and damp on the other. Even during the 1999 drought, the CSA growers were able to provide fresh produce for their members, albeit in limited quantity. The shareholders, in turn, were supportive of the growers and complimented them on their ability to provide food each week. The acid test of a grower's success and members' satisfaction is renewal; thus, the waiting list for next year's CSA is a testimonial to the strong interest in this CSA, and clearly is a positive sign of support for community agriculture and for strengthening local ties in an agro-food system. As DeLind and Harman-Fackler (1999:9) point out, "You have to keep tinkering with CSAs, not to make them more attractive, but to see how people can benefit more from them. These benefits extend well beyond dollars earned or vegetables received; they add to the organic matrix that contributes to community food security and to a sustainable way of life now and into the future." In my study, consumers who want to be part of a CSA are mostly committing themselves to a grower, and not just to the food in a bag.

The main difficulty identified in discussions with the four growers who had discontinued their CSAs was that they and the shareholders had different expectations of a CSA. The main reasons for abandoning the arrangement cited by these growers were time constraints, crop variety, and the labor needed to support the wide diversity of crops they planted. Post-harvesting handling and bag preparation required long hours in addition to the time needed to meet their other market obligations. Growers who had spent time in educating their shareholders commented that they received few or no negative comments regarding produce variety, bag weight, or dollar value. However, from the growers' perspective, those few unsatisfied shareholders had unrealistic expectations about what a "share" included. It seems that some dissatisfied consumers expected not only enough food to eat through the week but enough in addition to stock up the freezer for the winter. It is not surprising to learn of the occasional disappointed reaction when a proud grower provides seven pounds of food (such as peppers, eggplant, basil, beans, and squash) and a CSA member replies, "They're beautiful, but is this all I get? I can eat that in a week." From these accounts, it is apparent that the grower and shareholders have different perspectives on what a weekly share is to include.

Further discussion with growers who had arranged or currently have a CSA suggest that this marketing arrangement enable them to learn from their crop rotation plan and marketing strategy. These growers started out with a large variety of crops and learned what does best. Over time, they specialized and developed a reputation for certain commodities. For example, some are known for their salad mix, strawberries or tomatoes. However, it can take several years before growers decide whether to commit to a CSA for a period of time or opt for other markets. For example, a husband and wife team supported 40 to 70 members annually with three acres for nine years (1989-1998) before deciding to end their CSA arrangement. They used these nine years to learn which organic produce they grew best and what the market would support. They now specialize in only 15 crops over a season and sell weekly at a farmers' market, country clubs, flowers shops, and a food co-op. They are still in the role of educating consumers and chefs, but not through the CSA.

Another husband and wife team interviewed decided to abandon a CSA arrangement after three years. During that time they supported eight members with the weekly harvest from a one-acre plot. They concluded that their shareholders did not fully appreciate the time they had invested in their farm. They had offered working shares at a 20 percent discount to members but none participated. In her research on CSAs in Michigan, DeLind (1999) found similar attitudes, where shareholders want only to pick up a bag of fresh produce.

### **Conclusion: The Political Ecology of Organic Production**

Like most other human activities, organic food production takes place in a complex cultural, political and economic context. This paper focused on the relationship between growers and consumers, and how the relationship is influenced directly and indirectly by long-standing cultural practices and expectations, political decisions, the actions of governmental and non-governmental agencies, and by the economic factors that influence prices of both organic and conventional foods. I have shown how culturally shaped interest in organic food, and in particular CSAs and the seasonal availability of produce, affect growers' marketing strategies and success. The context within which organic growers must function is determined by state and federal standards for certifying organic food, government decisions about the location and management of farmers' markets, tax codes affecting farm income, and the eligibility of growers for farm subsidies and emergency relief based on politically determined criteria. This agriculture-food system can be analyzed using the theoretical framework of political ecology, an approach that combines a broadly defined political economy with the concerns of ecology (Blaikie and Brookfield 1987). Political ecology provides a theoretical structure that helps to understand the political, economic and ecological interactions, and is used here to more clearly understand the relationship among food producers, local governments, policy makers and local, regional and extra-regional markets vis-a-vis the linkages they maintain in the agriculture and food system.

Further study of the agriculture and food system as it relates to organic food producers and consumers will need to expand the field of analysis beyond the grower-consumer relation examined here to fully reveal the complexity of organic agricultural production in the state. The proposed national organic standards raise special concerns for the agriculture and food industry. Clearly, these new national guidelines will influence individual states' governance over organic

standards and, once again, force growers to incur risk as they continue to face new production and marketing challenges. There are clear opportunities for small-scale producers to develop alternative niche products as national and local demand for them increases. However, because of limited land resources, small-scale producers must retain the support of local customers or they will be squeezed out of the agriculture sector.

There are opportunities in North Carolina for small-scale producers to get involved in organic food production, especially as consumer interests and demand for products increase in an unsaturated market. Both farmers' markets and CSAs provide an opportunity for small- and medium-sized limited-resource growers in North Carolina to supply organic produce directly to consumers. Direct marketing approaches help to secure a place in the market and establish ties to consumers. These direct linkages with consumers will become central to the survival of the small family farm and of local agriculture. In other words, preserving rural space through direct support of local growers requires that consumers play an active role in re-connecting their food with a local food producer. Organic growers currently serve as advocates and educators, increasing consumers' (and others') awareness of organics.

Creating an alternative agriculture and food system could not be more timely. Economic, political, and environmental pressures are changing conventional agriculture in the United States. Nationally, the current agro-economic situation of reduced tobacco quotas and lowered prices for beef, cotton, grains, and pork is causing many farmers to leave the business, while forcing others to change their farming practices in hopes of creating new niche markets. It was anticipated that 40,000 farmers throughout the grainbelt of the U.S. Midwest would leave farming in 1999 (Hage 1999) with fewer younger farmers are joining the ranks. The national average age for U.S. farmers is 58, suggesting that younger people are not attracted to or cannot afford conventional agricultural start-up costs. In the southern region of the U.S., commodities such as beef, corn, cotton, pork, soybean, and tobacco have suffered heavy market losses, contributing to the decline in large-scale monocrop production and increased farmland loss to development and urban sprawl. Like other states, North Carolina is faced with national trends in conventional agriculture resulting in fewer and larger-scale farms, particularly among row-crop farmers. Economically, conventional farmers are feeling the pressure of low gross earnings per acre for traditional crops (See Table 1), with the result that more farmers are having difficulty remaining in the business of farming.

In North Carolina, 156,000 acres have been lost annually since 1992 to urban sprawl and development, retirement of aging farmers, and low economic returns. Between 1978 and 1997 in Guilford County, a central North Carolina county where suburbanization of open space has been rapid, there was a 36 percent loss of registered conventional farmers (from 1444 farms down to 920; Krouse 1999), a 21 percent farmland loss (from 142,099 to 111,882 acres), and a rise in average farm size by 22 percent (NCDA and CS1997, 1999a).

Does small-scale organic production present a viable alternative on a large scale to conventional agriculture? In principle, perhaps it does, because organic farmers are able to generate much higher income per acre than conventional farmers, but in order for this alternative to work out in practice a lot of the political-ecological landscape would have to change. For example, the current tax code offers many benefits to farmers but, because of the small amount of land most

organic farmers have in production, they cannot be classified as "farmers" in North Carolina, thus increasing their tax burden.

State regulations make it difficult for organic farmers to obtain benefits available to conventional farmers (such as subsidies and disaster relief), further weakening their competitive position (Hartmann 1999). Current organic production within North Carolina has not saturated the market; as noted earlier, 85 percent of organic produce sold in North Carolina comes from out of state.

In addition to these changes in the political and economic structure, consumers' expectations for fresh produce will have to change if organic farming is to become more successful. Farmers' markets and CSAs provide a structure through which the public can make a commitment to viable local agriculture and to a healthy local economy. A long-term goal of my research is to identify ways for organic growers to succeed economically, particularly by developing alternative ways of marketing and, thus, connecting consumers more directly to their agriculture and food system. By strengthening the linkages between consumers and growers, both through CSAs and by other means, we can increase consumer support for local agriculture, providing a wider range of economic opportunities for farmers seeking to maintain their traditional connections to the land.

### **References Cited**

Arnold, Mitch

1998 Organic Farming, A Growing Trend. Greensboro News and Record. 5 October:B4.

Barber, Lee

1999 Some Thoughts on Record Keeping. Stewardship News 19(3):3.

Barlett, Peggy

1993 American Dreams, Rural Realities: Family Farms in Crisis. Chapel Hill: University of North Carolina Press.

Belasco, Warren

1993 Appetite for Change: How the Counter Culture Took on the Food Industry. Ithaca: Cornell University Press.

Bernard, H. Russell

1995 Research Methods in Anthropology. Qualitative and Quantitative Approaches. Walnut Creek, CA: Altamira Press.

Blaikie, P., and H. Brookfield

1987 Land Degradation and Society. New York: Methuenand Co.

Bukovinsky, Janet

2000 Growing Gourmet. Organic Gardening March/April:21-22.

Bush, Pat

1999 Community Supported Agriculture at Handance Farm. Stewardship News 9(3):1.

Carolina Farm Stewardship Association (CFSA)  
1997 Membership Directory. Pittsboro, NC.  
1998 Certified Organic Growers' Manual. A Guide for Ecologically Responsible Farming Practices. Pittsboro, NC.

Cone, Cynthia Abbot, and Andrea Myhre  
2000 Community-Supported Agriculture: A Sustainable Alternative to Industrial Agriculture? Human Organization 59(2):-187-197.

DeLind, Laura  
1999 Close Encounters with a CSA: The Reflections of a Bruised and Somewhat Wiser Anthropologist. Agriculture and Human Values 16:3-9.  
2000 Transforming Organic Agriculture into Industrial Organic Products: Reconsidering National Organic Standards. Human Organization 59(2): 198-208.

DeLind, Laura, and Holly Harmen-Fackler  
1999 CSA: Patterns, Problems and Possibilities. The Many Faces of Community Supported Agriculture; A Guide to Community Supported Agriculture in Indiana, Michigan and Ohio. Laura DeLind, ed. Pp.5-9. East Lansing: Michigan Organic Food Alliance.

Denison, Niki  
1999 Harvesting the Double Helix. Wisconsin (Autumn):34-37.

Estes, Edmund, Tony Kleese, Laura Lauffer, Danielle Treadwell, and Rachel Burton  
1999 An Overview of the North Carolina Organic Industry. Report No. 17. Raleigh: North Carolina State University, Department of Agriculture and Resource Economics.

Gibson, Eric  
1994 Sell What You Sow! The Grower's Guide to Successful Produce Marketing. Auburn, CA: New World Publishing.

Green, Judy  
1998 Think Global, Grow Local. Farming Alternatives 6(4):5.

Griffith, David, and Ed Kissam  
1995 Working Poor. Farmworkers in the U.S. Philadelphia: Temple University Press.

Groh, Trauger, and Steven McFadden  
1997 Farmers of Tomorrow Revisited. Community Supported Farms Farm Supported Communities. Kimberton: Bio-Dynamic Farming and Gardening Association.

Hage, David  
1999 Bitter harvest. The Nation 11 October:5-6.

Hartmann, Steffan

1999 So This is Disaster Relief. Stewardship News 19(6):8.

Hilchey, Duncan, Thomas Lyson, and Gilbert Gillespie

1995 Farmers' Markets and Rural Economic Development. Farming Alternatives Program Community Agriculture Development Series. Ithaca, NY: Cornell University.

Hitt, Alex

1999 Farmers Hope to Get Smaller by Refining Production on Each Acre. Growing for Market June: 10-12.

Kane, Deborah

1998 Maximizing Shareholder Retention in Southern CSAs. OFRF Information Bulletin. No. 5 (Summer):8-9.

Krouse, Peter

1999 Local farmers look for other ways to make money. Greensboro News and Record 22 August:El.

Long, Cheryl

1999 Certified Organic: A Guarantee of Pure, Wholesome Food. Organic Gardening:46(6):44-45.

Madison Area Community Supported Agriculture Coalition  
(MACSAC)

1999 Community Supported Agriculture: Connect You with Your Food. Monona, WI.

North Carolina Department of Agriculture and Consumer Services  
(NCDA and CS)

1997 North Carolina Agricultural Statistics. Volume 187. Raleigh, NC.

1999a. Agriculture Overview. North Carolina Department of Agriculture and Consumer Services, <<http://www.agr.state.nc.us/stats/general/general.htm>>

1999b Electronic document. North Carolina Department of Agriculture and Consumer Services. <<http://www.agr.state.nc.us/stats/crops.htm>>

Lyons, Kristen, and Geoffrey Lawrence

1999 Alternative Knowledges, Organic Agriculture and the Biotechnology Debate. Culture & Agriculture 21(2):1-12.

Organic Trade Association (OTA)

1999 Electronic document. Organic Trade Association. <<http://www.ota.com/facts.htm>>

Ostrom, Marcia Ruth

1997 Toward A Community Supported Agriculture: A Case Study of Resistance and Change in the Modern Food System. Ph.D. Dissertation. University of Wisconsin.

Stephenson, Garry, and Larry Lev  
1998 Common Support for Local Agriculture in Two Contrasting  
Oregon Cities. Portland: Oregon State University  
Extension Service. <[http://smallfarms.orst.edu/  
commonsupport\\_for\\_local\\_agricutl.hrm](http://smallfarms.orst.edu/commonsupport_for_local_agricutl.hrm)>

Welsh, Rick  
1999 The Economics of Organic Grain and Soybean Production in the Midwestern United States.  
A report for the Henry A. Wallace Institute for Alternative Agriculture. May.  
<<http://www.haiaa.org>>

Yarger, Lenore  
1999 Market is Wide Open for Organic Farmers. Stewardship News 19(4):1.