

The Potential for Community Supported Agriculture
(CSA) in Rhode Island: Evaluating the Durability of
the CSA Model for Agricultural Decision-Making in
the 21st Century

by

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ABSTRACT

This thesis examines the potential for expanding community supported agriculture (CSA) in Rhode Island by addressing three questions. First, what are the benefits of increasing the quantity of community supported agriculture grown produce in Rhode Island? Second, what limits the development of community supported agriculture in Rhode Island? Third, what factors are contributing to the success of Casey Farm as a CSA and what do they imply about the future of community supported agriculture in Rhode Island?

Data on Rhode Island agriculture reveals that CSA farms as a mechanism for regional food production and food distribution within Rhode Island have not yet fully been explored. The findings of this thesis demonstrate that neither a lack of available farmland nor a lack of new CSA members are what limits the number of CSA farms in Rhode Island. Rather it appears that as of 1998, limits to the potential for community supported agriculture in Rhode Island are primarily a lack of CSA farmers and inadequate access to financing for additional CSA farms.

There are clear economic, educational, environmental and social benefits to increasing the quantity of Rhode Island CSA grown produce. Casey Farm's CSA efforts demonstrate that effective management practices, diversification of CSA farm services, the use of niche marketing strategies and a suitable location, are all vital to the durability of a CSA farm. CSA farms, along with other forms of commercial agriculture, offer an innovative way for Rhode Island to both promote and prioritize open space, rural character, natural resources, regional tourism, historic preservation, sustainable agriculture and balanced municipal development.

INTRODUCTION:

“Among material resources, the greatest unquestionably is the land. Study how a society uses its land, and you can come to pretty reliable conclusions as to what its future will be.”

- *E.F. Schumacher*

Community supported agriculture (CSA), also known as community *shared* agriculture, is an agricultural production and distribution system primarily characterized by the establishment of a direct producer consumer partnership. Regardless of its location or size, a CSA must eliminate the need for intermediaries between agricultural producer and consumer and utilize either a single or installment payment plan. CSA farms follow this distinctive distribution and payment format so as to create an economically viable form of regional agriculture. In the U.S., the overwhelming majority of CSA farms have traditionally been fruit and vegetable farms. Yet, the CSA model can be applied to various forms of agricultural distribution systems. The CSA model has been used outside of Rhode Island in the distribution of fresh bread, flowers, cheese, meat and a variety of other agricultural products.¹ Though the CSA model originated in Japan,² the concept of community supported agriculture has roots in the cooperative movement as well, which emerged and gained ground in the U.S. during the post World War II era.

The first CSA in the U.S. was started in 1985 at Indian Line Farm in South Egremont, Massachusetts.³ In the early 1990s, Jeffrey Kamminga organized and managed the first CSA in Rhode Island.⁴ Since that time, there have been six additional CSA operations initiated in Rhode Island. However, as of 1998, there are four operational Community Supported Agriculture (CSA) farms in Rhode Island.

The first is Casey Farm located in Saunderstown. It is the largest CSA in Rhode Island with 140 members. The second is Bally Machree Farm in Middletown, a new CSA as of 1998, with approximately 50 members and operating on a delivery basis to the Providence area. The third is Hilltop Gardens, a small-scale CSA in Tiverton with 32 members. And the fourth is Wishing Stone Farm, a modified CSA with 80 members, operating on a credit basis in Little Compton.⁵ Though, the four CSA farms in Rhode Island are all successful in terms of membership numbers, retention rates and stable or increasing consumer interest, it is also hard to ignore the fact that three CSA farms have shut down over the last eight years. With a less than 60% success rate for CSA farms in Rhode Island, one might be tempted to say that, based on empirical evidence, CSA farms in Rhode Island are almost as likely to fail as they are to succeed.

To understand each of the three individual CSAs that failed, it is useful to examine the reasons for their failures. The three CSA farms that shut down were Earthly Delight, Earth Care Farm, and Phoenix Gardens. Financial problems lead to the shut down of Earthly Delight and complaints from nearby residents of increased automobile traffic, due to CSA members, caused the cessation of CSA activity in the latter two cases.⁶ In effect, the reasons for the closing of these three CSA farms in Rhode Island becomes clearer when one

understands some of the location, management, diversification and land ownership requirements of a successful CSA operation.

However, it is important to remember that initial CSA farm managers in Rhode Island were pioneers and entrepreneurs in their fields, both literally and metaphorically. The notion of community involvement, or support, in agriculture was relatively new and unknown to Rhode Island residents in the late 1980s and early 1990s. Though no data is available on the popular recognition of the term and concept of community supported agriculture (CSA) in Rhode Island, it seems safe to postulate that in the early 1990s the majority of Rhode Island residents were unfamiliar with the term CSA, and the concept behind it. Furthermore, it seems logical and safe to assume that more people are familiar with CSA farms in the late 1990s than were familiar with them a decade earlier.

The options for disseminating CSA related information are also more sophisticated now than they ever have been. Internet technology now allows those with internet access to discover, browse and 'surf the web' for information on CSA farms in Rhode Island, as well as in the U.S. or around the world. As consumer education and widespread publicity play a large role in the diffusion of information about community supported agriculture, present and future CSA farms have the advantage, over past CSA farms, of using new avenues for advertisement and membership recruitment.

In 1998, CSA farms are no longer an experiment in agriculture, nor are CSA farm managers learning largely through trial and error as they did in the early 1990s. However, the CSA model is by no means fully evolved. In Rhode Island and elsewhere, constantly fluctuating produce prices, development pressures, regional immigration and emigration trends, crop failures, increased operating costs and a host of other socio-economic factors imply that no CSA can enjoy guaranteed success by simply following a list of predetermined steps. Moreover, it is worth mentioning that crop failures, natural disasters and ever changing market influences are problems encountered by all farmers. CSA farmers are affected by many of the same socio-economic pressures and natural disasters as contract croppers, farmer's market growers, monoculture agribusiness farmers, sod farmers and truck farmers.

Currently, all four CSA farms in Rhode Island are certified organic farms, but community supported agriculture does not have to involve organic agriculture. In order to understand why all CSA farms in Rhode Island are organic, one must examine the reasons for the existence of CSA farms in Rhode Island, as discussed in the section entitled 'Why Study CSA in Rhode Island?'. In providing an explanation as to why CSA farms merit our attention in Rhode Island, it is also necessary to analyze the components of a successful CSA operation. Casey Farm's CSA serves as a perfect model in this respect. The case study data on Casey Farm's CSA and its implications for CSA in Rhode Island are discussed in the section entitled 'Case Study: Casey Farm Results'. After exploring the

specific details of Casey Farm, looking at the bigger picture becomes useful in evaluating regional food production issues. Can CSA farms act as a future vehicle for active farmland preservation and agricultural food production? Why are there significant obstacles to regional food production in Rhode Island? Such pertinent and topical questions are discussed in ‘Evaluating Regional Food Production Issues’.

The final section entitled ‘Conclusion: The Potential for CSA in Rhode Island’ summarizes whether or not CSA farms are well suited for Rhode Island, highlighting the responses to the following three thesis questions concerning the potential of community supported agriculture in Rhode Island. First, what are the benefits of increasing the quantity of community supported agriculture grown produce in Rhode Island? Second, what limits the development of community supported agriculture in Rhode Island? Third, what factors are contributing to the success of Casey Farm as a CSA and what do these factors imply about the future of community supported agriculture in Rhode Island?

WHY COMMUNITY SUPPORTED AGRICULTURE (CSA) IN RHODE ISLAND?

As the second most densely populated state in the U.S.,⁷ Rhode Island is an interesting state in which to study the potential for community supported agriculture (CSA). Rhode Island's thirty-nine municipalities are all in close proximity to Rhode Island's 68,000 acres of prime and unique farmland.⁸ Following past trends, Rhode Island's population remains concentrated in the state's metropolitan areas, with less than 9% of the state's population residing in non-metropolitan areas in 1997.⁹ What this means is that the minimal distance in Rhode Island between high population densities and fertile farmland is conducive to a successful CSA, given that CSA farms are dependent on a threshold number of members.

Over the past couple years there has been increased interest in Rhode Island in maintaining and promoting open space, rural character, historic preservation, natural resources, local agriculture and reduced suburban sprawl. These issues are all, directly or indirectly, maintained and promoted by CSA farms. Being the smallest state in the U.S., Rhode Island is less flexible and has more constraints on land use choices than most other states. As Rhode Island continues to develop, it is being forced to protect open space and farmland, if it is to preserve the rural and inviting Rhode Island landscape. It's historic and rural landscape, along with the state's extensive coastline, plays a major role in making the state's \$2.05 billion dollar tourism industry the fastest growing sector of Rhode Island's economy.¹⁰

Though the same holds true for most types of agriculture, the CSA model of agriculture is very appropriate in serving as a means of preserving the rural characteristics and tourism appeal of the Rhode Island landscape. A series of 1995 URI public perception polls conducted at Department of Motor Vehicles (DMV) offices across the state,¹¹ found that farmland preservation is thought of by Rhode Islanders as a means of preserving the aesthetic benefits of "natural places", the biological benefits of "wildlife habitats", and providing clean "groundwater" for the state. However, on average, "providing local food" as a reason to preserve farmland was ranked fourth in importance by the poll's sample population. Though community supported agriculture was never mentioned in the study, this study indicated that in the opinion of many Rhode Island residents, agricultural food production is not one of the most important reasons to preserve farmland in the state.

There are three explanations as to why Rhode Island food production is not perceived as playing an important role in the state's economy, or New England food production as a whole. The first is that Rhode Island has relatively little farmland on which to grow and raise food, as it is the smallest state in the U.S. in terms of surface area. Second, there are significant numbers of nursery operations and commercial sod farms in the state and thus the majority of Rhode Island's agricultural acreage is devoted to non-food producing types of agriculture. The resulting economic impact is that the majority of the state's agricultural revenue is not from food production. And the third explanation is that

nursery and sod products grown in Rhode Island have a higher retail value than most food grown in the state. Thus the value added to the Rhode Island economy by sod farm and nursery sales is far greater than the value added by food production sales.

The relative success of CSA farms in Rhode Island, implies that CSA farms *can* be used as one of several means of increasing interest in regionally grown food. Given that the first CSA in Rhode Island was started less than ten years ago, CSA farms are still in their fledgling phase in this state. Historically speaking, there never has been any organized or recognized CSA movement in Rhode Island. Individuals who were already interested in agriculture before starting a CSA have initiated all the CSA farms in Rhode Island. To date, there have been no consumer initiated CSA farms in Rhode Island. Taking this into account gives one a better sense of the current condition of CSA farms in Rhode Island.

Yet, how does one use this knowledge in evaluating if CSA farms are a viable and durable means of increasing long-term levels of food production across Rhode Island? A simple answer to this question is that in a state which 55 years ago was 39% farmland,¹² the potential still exists to increase present levels of food production through both consumer and producer initiated CSAs. The following passage from the *Rhode Island Soil Survey* conducted in 1975, serves as a trace of where certain types of agricultural production, and especially food production, have historically occurred across the state.

“(In 1969) the major farming activities (of Rhode Island) included the production of potatoes, nursery stock, sod, truck crops, orchard products, and dairy and dairy products. Dairy and poultry farms are located in every county in the State. The larger nurseries and potato farms are on some of the better farmland on the nearly level outwash plains of Washington County and gently sloping drumlins of Newport County. The major nursery crops are yews and rhododendrons, and most of the crop is sold to retail dealers throughout the United States. The sod farms are in Washington County, generally on land that has been used for potatoes. Most truck farms are in Providence and Newport Counties, and the orchards, most of which produce apples, are in Providence County.”¹³

In Rhode Island, which in 1998 is covered by approximately 55% forest lands and 7.4% farmland,¹⁴ the conflict between conservation areas and CSA farms are minimal. Where the tradeoffs come into play with CSA farms is when the farmland is considered appropriate for other forms of more lucrative agricultural production. In these situations, there is no means of insuring that a CSA should, or will, develop instead of a commercial sod farm or a nursery operation. The slow increase in CSA farms since 1990, though serving to diminish Rhode Island’s agricultural imports ever so slightly, did not compete with the many non-CSA food producing farms in Rhode Island.

The question thus becomes is it desirable to increase the amount of CSA grown produce in Rhode Island, rather than increasing the amount of other commercially sold

organic or conventionally grown produce? However, the answer to this question is quite subjective and complex, as it clearly revolves around personal opinion. I will address this question and others in the next several sections.

CASE STUDY: CASEY FARM RESULTS

In examining the general criteria for establishing a CSA, one understands why Casey Farm has been successful. First, a CSA farm requires relatively fertile arable land on which

to grow produce. Casey Farm is located on prime sandy loam farmland soil that has been in agricultural production for over 250 years. Second, in the case of a CSA with shares being picked-up by its members a CSA must be located in a community receptive to increased volumes of vehicle traffic. In the case of a CSA operating on a delivery basis, the CSA must be situated within delivery range, or reasonable driving range, of a significant population density. Situated on 'Scenic Route 1A', Casey Farm is on a two lane previously used road. In this case, the small to moderate increase in traffic due to CSA members would in no way detrimentally affect the surrounding community. Third, the potential for a CSA farm is heavily dependent on the retention rate of the CSA membership base. Thus, the CSA farm must gauge the interest levels of the regional population in order to determine if the target audience is large enough to warrant starting a CSA in the designated location. Though Casey Farm CSA members are distributed over a thirty mile radius, over 82% of Casey Farm CSA members live within a fifteen mile radius of the farm.¹⁵

What are the other factors that play a role in the success of Casey Farm as a CSA? In effect, competent management seems to be one of the dominating factors in determining the success of Casey Farm, as well as any CSA. The reason being that farm management is at the center of virtually all the stages of a CSA. The CSA management can publicize the CSA in order to maintain or increase membership numbers, incorporate outside items or alternative activities into the CSA, negotiate community integration, properly calculate overhead costs, establish a reasonable share price, determine the crops to be grown, and adjust the functioning of the CSA to better target the membership audience. Hence, attracting the desired membership numbers is an indirect reflection of a CSA farm's management standards, principles and priorities. Nevertheless, as much as community interest in a CSA, or lack thereof, can be driven by the managers of a farm, it can also be driven by external influences. Thus, Casey Farm is not an indicator of the condition of all CSA farms in Rhode Island, but rather a representation of what has worked well within the context of Casey Farm.

Most of the original data collected for this thesis is based on Casey Farm's CSA operation. Casey Farm has been a CSA since 1993, under the auspices of SPNEA (The Society for the Preservation of New England Antiquities). SPNEA is a non-profit preservation society that owns and operates Casey Farm and over 300 acres of land encompassing the farm. SPNEA has been instrumental in preserving Casey Farm and its CSA operation. The Boston based preservation society provides Casey Farm with a tax-exempt status, a certain amount of annual funding and publicity about Casey Farm's diverse activities through SPNEA literature. Furthermore, historical records about Casey Farm's agricultural practices, which date as far back as the 18th century, are maintained on file at SPNEA's office in Boston.

I selected Casey Farm as the model CSA on which to base my research for three reasons. First, Casey Farm's CSA was the largest CSA operating in Rhode Island during the time I was conducting my research in the summer and fall of 1997. The large size of Casey Farm's CSA, both in membership size and the number of acres devoted to growing CSA produce, was important in efforts to obtain data on the geographic distribution of CSA members.¹⁶

Second, Casey Farm was the only CSA in Rhode Island that had consistently increased in membership size since its first year of operation. This was important, as I wanted to study a CSA that had been successful over several consecutive growing seasons.¹⁷

Third, joining Casey Farm's CSA allowed me to collect empirical data about a CSA farm in Rhode Island. As a half share member of Casey Farm's CSA, one received a weekly assortment of produce from June to October of 1997.¹⁸ The price of a 1997 half share membership at Casey Farm's CSA was \$275 and the comparable value at *Shaw's Supermarket*¹⁹ and *Eastside Marketplace*²⁰ for the amount and type of produce received as a half-share member of Casey Farm equaled \$310 and \$380, respectively.²¹

However, several points must be clarified concerning the equivalent retail price comparison. The retail price of produce fluctuates on a daily basis, as well as quite significantly on the basis of individual retailers (Shaw's vs. Eastside Marketplace vs. Stop & Shop vs. Bread and Circus, etc). Thus, a cumulative total of the equivalent retail price of produce received throughout an entire growing season is highly variable depending on both the date and the location of purchase.²² Furthermore, the produce grown at Casey Farm was both locally and organically grown. When faced with the weekly task of recording the corresponding supermarket price of Casey Farm grown produce, a choice had to be made between recording the price of distantly grown organic produce, or locally grown non-organic produce.²³ For the purposes of the price comparisons, locally grown non-organic produce prices were recorded rather than distantly grown organic produce prices.

It is worth mentioning as well that the amount of weekly produce received from Casey Farm was fixed in almost every case, but with one noteworthy exception. The practice of offering PYO (Pick Your Own) is often used by CSA farms to allow members to participate in harvesting produce that is labor intensive.²⁴ This method of having individuals harvest as much or as little of a certain variety of produce meant that only rough estimates, of the amount an average member might harvest on any given PYO day, could be established for the purposes of the price comparison.²⁵

What the price comparison data reveals is that there is no significant economic incentive for people to buy a Casey Farm CSA half-share. In other words, you do not save much, if any, money by joining Casey Farm's CSA. Though the net amount I paid for the Casey Farm produce was less than what one would have had to pay at either *Shaw's* or

Eastside Marketplace, factoring in the cost of fuel for the roundtrip drive from Providence to Saunderstown made the overall cost of the CSA half-share more expensive than the equivalent price of buying the produce at *Shaw's* or *Eastside Marketplace*.

These financial tradeoffs of many CSA memberships are a substantial drawback to the perspective member. In addition, the predetermined weekly selection of CSA produce restricts members to varieties of food which one might not otherwise buy. The problem with the CSA system, in this respect, is that the majority of Rhode Island residents have an annual, monthly or weekly budget for buying food. Thus, on average, becoming a CSA member places certain limits on one's food purchasing power and overall finances. As a solution to this problem most CSA farms allow for a certain number of members to sign-up as work share members.²⁶

The work share, which gives a work share member the same amount of produce as a paying half-share members, is vital to keeping the opportunity of a CSA membership available to all socio-economic backgrounds in a community. As it is understandable that an individual would be hesitant to invest financially in a CSA share without a quantitative or qualitative guarantee about the produce he or she will receive, the barter agreement between the producer and consumer can work well for both. Not obliging every CSA member to pay a membership fee before the start of the CSA season provides an effective means of recruiting members of various financial means. Also, as the Rhode Island CSA membership season is roughly six months long, this is a reasonable amount of time in which to integrate the required work hours into a busy schedule. It is true that the members who pay and the members who work for their share may feel varying degrees of connection with the land and the farm, but nonetheless the option is there for lower income families and individuals to contribute their time on a farm in exchange for locally grown organic produce.

The choice of switching from a currency transaction to a form of barter economy can be extremely useful in the context of a CSA. However, the limits of barter are quite clear from both the consumer's and the producer's points of view. Rhode Islanders, like most Americans, cherish their leisurely time as well as their consumer right to *choose* from a wide variety of brand name foods at the supermarket. The commitment involved in a work share may be viewed by many as simply more work and therefore not worth the extra time they would have to spend at the farm. From the producer's perspective, the farm managers need to make enough of profit to pay for the operating costs of the farm, purchase personal items and live with an acceptable margin of financial stability. Hence, neither at Casey Farm nor any other CSA can work shares comprise the majority of a CSAs membership base.

EVALUATING REGIONAL FOOD PRODUCTION ISSUES:

The agricultural system in place in the U.S. has tended to have food grown at quite a distance from the place where it is consumed. Studies at the University of Massachusetts, in conjunction with the USDA, have examined the relationship between agricultural production and agricultural consumption. What these studies determined is that, "food in the U.S. travels an average of 1,300 miles from the farm to the market shelf. Almost every state in the U.S. buys 85-90% of its food from someplace else."²⁷ One of the roles a CSA farm serves is to reduce a state's reliance on food importation. What is important to realize is that in Rhode Island's case, as well as any other state, there are significant benefits to be reaped in reducing a state's levels of food importation. In economic, agricultural, sociological, and environmental terms, maximizing state food production is advantageous to the state.

Additional University of Massachusetts research on interstate agricultural commerce found that, "In Massachusetts, for example, this food import imbalance translates to a \$4 billion dollar leak in the state economy on an annual basis . . . Massachusetts could produce closer to 35% of its food supply. This 20% increase would contribute \$1 billion annually to the Commonwealth."²⁸ The economic burden of imported food is surprisingly costly and though an interstate agricultural trade imbalance of this magnitude is often considered the 'norm' in the Northeast, in Rhode Island there is land available for reducing the magnitude of this agricultural imbalance.

In the Northeast, the explanation behind the overwhelming majority of out-of-state agricultural imports is explained by the relatively limited growing season and the higher profits posted in non-food producing agriculture. In 1996 for example, only 10% of the Rhode Island's agricultural revenues were from fruit and vegetable sales.²⁹ If you were to decrease the importation of agricultural produce, a greater reliance on local and regional agricultural production would therefore become necessary. However, based on supply and demand economics, we know that this phenomenon only occurs in a unidirectional chronological order. In other words, the amount of agricultural imports decreases only after food production in Rhode Island has substantially increased. In this scenario, CSA farms and Rhode Island food producing farms in general would have to increase either in numbers or in production capacity in order for the supply of regional agricultural production to reduce the demand for out of state agricultural products. Within this argument is contained one of the issues which Rhode Island must eventually come to terms with in the near future.

Would Rhode Island benefit in any tangible way from promoting or creating incentives for increased levels of regionally grown produce? Seeking an answer to this question should help Rhode Island residents explore the consequences of, as well as the alternatives to, continuing to import 90% of the food consumed in Rhode Island from out of

state. Some of the possible consequences of this current trend of reduced agricultural production in the state and hence limited potential for CSA farms, are: 1) increased development in rural areas, 2) generally weakening American's already diminished sense of responsibility in land stewardship issues, 3) furthering a possibly unsustainable system of food distribution and 4) provoking economic losses to the state by maintaining current trends of food importation from out of state.

Possibly, the long-term economic, cultural, ecological, and socio-economic benefits of CSA farms may eventually be deemed to be of greater value to Rhode Island and its citizens than other forms of agriculture. As of now, the free market dictates that sod farms, nurseries and conventional or traditional agricultural operations are the biggest players in Rhode Island agriculture. However, community involvement in CSA farms could in the future prove to be a very powerful tool in aiding in the survival of a more traditional form of regional agriculture. In this respect, Casey Farm is a perfect example of the additional services that a CSA can render to surrounding municipalities.

Though this thesis has outlined and identified the problems and success stories of CSA farms in Rhode Island, these are not distinctively the qualities of Rhode Island CSA farms. It is important to remember that Rhode Island offers a small sample size of CSA farms. Gauging the potential of CSA farms in Rhode Island should also reflect the potential for CSA farms in other Northeastern states, which also share the same agricultural, developmental, and community pressures as Rhode Island while being limited by similar seasonal and climactic constraints.

Lastly, CSA stresses regional food production as much as a direct consumer and producer partnership. Thus purchasing locally grown produce from a farm stand every week should be considered an informal model of CSA. The CSA model that Skip Paul has established at *Wishing Stone Farm* requires that the consumer pay a membership fee in the beginning of the season yet with the flexibility of using his or her credit at the Wishing Stone Farm 'farm-stand' at any point during that season, as well as any season thereafter.³⁰ This innovative CSA format, which operates on a credit basis, allows members unlimited choice in the purchasing of produce and unlimited flexibility in the times available to pick-up the produce, while maintaining the elements of a regional food production system and a direct consumer and producer partnership in a 'user friendly' community supported agriculture format.

CONCLUSION: THE POTENTIAL FOR COMMUNITY SUPPORTED AGRICULTURE IN RHODE ISLAND

An analysis of the potential for greater numbers of CSA farms in Rhode Island initially requires an estimate of the farmland available on which to establish them. Farmland in Rhode Island is expensive and property taxes are high. In 1996, the average market value of farmland in the state was \$7,204 per acre, the second highest in the United States. In 1994, Rhode Island ranked first of the fifty states with the highest real estate tax per acre, at over \$56 per acre.³¹ Therefore rather than solely calculating the acres of farmland available in Rhode Island, what should be taken into consideration is the availability of *affordable* farmland in Rhode Island.

According to the last fifteen years of Agricultural Census data, Rhode Island has been losing farms and farmers throughout the 1980s and early 1990s. Between 1982 and 1992, the total quantity of land on all Rhode Island farms dropped from 62,466 acres to 49,601 acres, a 20% decline of 12,865 acres in ten years.³² In addition, the 1992 Census of Agriculture revealed that the average Rhode Island farmer was 53 years old.³³ The impacts that the aging population of Rhode Island farmers will have on food production and the potential for additional CSA farms in the state is still unknown. Though it appears that during the last few years there has actually been a stabilization, and possibly even a slight resurgence, in Rhode Island agriculture, it is too early to tell. With the release of the 1997 Agricultural Census results in 1999, we will have a better understanding of where Rhode Island stands in terms of agriculture and food production.

Rhode Island is now reaching the point at which land use planning is becoming a high priority for the state. Due to urban expansion, industrial development, suburban sprawl and the unlikely probability that forest land will be converted to farmland in the future, Rhode Island will soon be forced to make a choice between being a state which continues to import over 90% of its food from out of state, or becoming a state which values its food production. The assumption that CSA farms and farmland preservation cause municipalities to lose development revenue is false. Residential development projects are not typically the most attractive short-term economic opportunities available to Rhode Island communities and municipalities. Numerous 'Cost of Community Services' studies across the U.S. funded by organizations such as the *American Farmland Trust*, *The Trust for Public Land*, and the *Southern New England Forest Consortium* have all demonstrated that residential developments end up costing municipalities more than the tax revenue generated by the new residential tax base.³⁴ In other words, CSA farms and other forms of agriculture, are a better deal for the taxpayer than a residential development.

In reviewing Rhode Island land use data, it is clear that both high population density and suburban sprawl have significantly driven up the prices of farmland over the last two decades. The Rhode Island Rural Lands Coalition has documented that, “Southern Rhode Island is one of the three fastest growing areas in New England.”³⁵ In addition, the American Farmland Trust ranked farmland in Rhode Island and neighboring states as the 10th most threatened area of farmland in the United States.³⁶

All around Rhode Island, the tradeoffs between the benefits of development and the benefits of agriculture and open space are currently being weighed by Rhode Island’s municipal governments and numerous state agencies, along with the efforts of land use planning organizations such as *Grow Smart Rhode Island*.³⁷ Simultaneously, due to the state’s passing of the *Comprehensive Planning and Land Use Regulation Act of 1988* and the *Zoning Enabling Act of 1991*,³⁸ many municipalities are rewriting their zoning ordinances and land use provisions in an effort to either preserve or develop designated open space, farmland, forest or historic areas. The resulting changes to local ordinances, along with a growing movement to enact a state imposed differential tax assessment law, could make it easier for new CSA farms to become established in Rhode Island. As Rhode Island has only two layers of government, municipalities and the state government,³⁹ the landscape and agricultural impacts of modifying municipal zoning ordinances could be significant. It is worthwhile to stress that revisions to municipal zoning ordinances and land provisions may significantly determine the future of farmland and open space preservation in Rhode Island. Likewise, citizen activism and public input in land use debates and the farmland preservation process will also drastically alter the landscape of Rhode Island in the next couple decades.

CSA farms in Rhode Island are in a similar position to the Rhode Island landscape. The impacts that small groups of committed and energetic citizens will have on the Rhode Island landscape and the potential for CSA farms are quite comparable. In both cases, core groups of active and vocal members of society are necessary in the start-up stages of the process in order to legitimize and publicize the important elements and relevant issues.

The potential for community supported agriculture in Rhode Island hinges, largely, on how Rhode Island residents respond to the CSA model. Individuals interested in starting a CSA farm should take advantage of the increasing number of financial and informational support organizations that provide assistance to community supported agriculture farms. *The New England Small Farm Institute’s* ‘New England Land Link’ program is a perfect example of a tremendous resource, which helps to establish new farmers in New England by matching them up with retiring farmers who would like to pass on their land to other farmers.⁴⁰ Equity Trust, Inc. is another example of the growing number of resources

available to potential CSA farmers who are looking to permanently settle on a piece of land in Rhode Island and require financial or legal assistance in doing so.⁴¹

The CSA model should be examined in comparison to other types of land use, including different types of agriculture for which the land could be potentially used. As is true for the real estate market, one might say that another important factor determining the potential success of a new CSA farm in Rhode Island would be their, 'location, location, location'. Thus, the prospects of additional CSA locations in the state should be studied on a case by case basis, based on the anticipated type of CSA produce distribution and the anticipated needs of the farmer.

In the future additional CSA farms in Rhode Island, in conjunction with various other types of agricultural production and distribution, could serve to develop a more regionally based food production system in Rhode Island and throughout New England. However, though community supported agriculture can play a role in the process of reintroducing regional food production into Rhode Island, community supported agriculture will most likely only play a minor role in this process.

In 1998, the quantity of CSA grown produce in Rhode Island is limited in a general sense by the disincentives the U.S. market economy provides for marketing CSA produce to the general public. More specifically, the short-term consumer oriented characteristics of the CSA model do not provide enough flexibility or benefits to the average Rhode Island resident to warrant them becoming a member of a CSA farm. These consumer oriented characteristics of the CSA model, thus far appealing to only a limited yet presently unsaturated percentage of the Rhode Island population, will likely prevent CSA farms in the future from becoming a widespread system of food production and distribution in Rhode Island. It is highly probable that the potential for additional CSA farms in Rhode Island will continue to be limited by the convenience and price/quality ratio advantages of conventional food production and distribution in Rhode Island and the United States as a whole. Despite these influential factors and trends, rather than a limited CSA membership audience and a lack of farmland availability, *currently* the limiting factors to establishing additional CSA farms in Rhode Island are a lack of CSA farmers and CSA farm financing.

Questionnaire for CSA Managers
Fall 1997 - Rhode Island CSA Farms

- #1. What in your opinion would be the optimal size for a CSA operation?
(* Please mention membership size, production capacity, and other factors which you consider to be relevant.)
- #2. a) How many members do you have at the moment?
b) What, or how much, are your various membership fees and policies (work share, 1/2 share, full share, etc.)?
c) Is your membership base increasing on a yearly basis?
d) Do you have more membership requests than you can accept?
e) Do you plan on increasing or reducing your membership numbers in the future? For what reasons?
- #3) Do you receive any complaints from nearby residents, the municipality, or others about the CSA, and if so what are they and how frequently?
- #4) a) What are the three most troublesome aspects of CSA management and for what reasons?
b) What three crops do you consider to be the most labor intensive?
c) What three crops do you consider to be the most expensive to grow?
- #5) What do you consider to be the major hindrances to the CSA movement in Rhode Island? (either general or specific points)
- #6) Do you believe that CSA farms should always grow organic produce?
- #7) a) How many CSA interns and employees are on the farm and how are they compensated (please be specific)?
b) What are your hours on a regular basis and do you feel you have relatively enough personal time for non-CSA related activities?

#8) How profitable is your CSA operation and have net earnings risen or declined since the first year of operation?

#9) Please feel free to write any additional comments or ideas about your CSA or the CSA movement in general in the space provided below?

Thank you very much!

INTERVIEWS

- I. Mike & Polly Hutchison - *Casey Farm, Managers*
- II. Dan Lawton - *Division of Agriculture, Coordinator of Organic Certification*
- III. Jeffrey Kaminga - *River Farm, Manager*
- IV. George Johnson - *Rhode Island Statewide Planning Program, Principal Planner*
- V. Sharon Culberson - *Hilltop Gardens, Owner and Manager*
- VI. Skip Paul - *Wishing Stone Farm, Manager*

CONTACT LIST

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Address: Northeastern Office, Herrick Mill , 1 Short Street
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 Tel. # (413) 586 - 9330
 WEB URL - <http://www.farmland.org>
2. Biodynamic Association
Address: P.O. Box 550, Kimberton PA 19442
 Tel. # 1 (800) 516 - 7797
3. Community Supported Agriculture of North America (CSANA)
Address: Indian Line Farm, Box 57, Jugend Road
 Great Barrington, MA 01230
 Tel. # (413) 528 - 4374
 Email: csana@bcn.net
4. Community Alliance with Family Farmers
Address: P.O. Box 363, Davis, CA 95617

Tel. # (916) 756 - 8518
WEB URL - <http://www.caff.org>

5. CSA Works
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14. O'Neal, Vicky: Natural Resources Conservation Service (NRCS)
Address: 60 Quaker Lane, Suite 42, Warwick, RI 02886
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15. O'Reilly, William & Barbara: Bally Machree Farm, Managers
Address: 704 Jepson Lane, Middletown, RI 02842
 Tel. # (401) 849 - 7037
16. Paul, Skip: Wishing Stone Farm, Manager & Owner
Address: 25 Shaw Road, Little Compton, RI 02837
 Tel. # (401) 635 - 4274
17. Rhode Island Rural Lands Coalition
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 60 Quaker Lane, Suite 46, Warwick, RI 02886
 Tel. # (401) 822 - 8832

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Van En, Robyn, Basic Formula to Create Community Supported Agriculture. CSANA, Indian Line Farm: Box 57, Jugend Road, Great Barrington, MA 01230

¹ “Community Supported Anything”: Audio tape of recorded conference session at Northeast Regional Community Supported Agriculture Conference – November 7-8, 1997: Send information requests to following address: CSANA, 57 Jug End Road, Great Barrington, MA 01230

² *Source*: UMASS web page (URL) - <http://www.umass.edu/umext/CSA/aboutcsa.html>

³ Indian Line Farm, RR 3, Box 85, Great Barrington, MA 01230 [Headquarters for CSA of North America (CSANA)]

⁴ Earthly Delight CSA (*Source*: Interview with Jeffrey Kamminga & 1997 Directory of CSA Farms in North America, Publication of CSA of North America)

⁵ See *Appendix B* for full listing of CSA farms currently operating in Rhode Island.

⁶ The following people once operated CSA farms in Rhode Island: Earthly Delights CSA – Jeffrey Kamminga, Earth Care Farm CSA - Mike Merner, Phoenix Gardens - Jeanne Wettlaufer (See *Appendix B* for more information)

⁷ Equivalent of 958 persons / sq. mile (Source: U.S. Dept. of Commerce, 1994)

⁸ See web site of Rhode Island Resource Protection Project, URL - <http://www.edc.uri.edu/rirpp/>

⁹ Rhode Island’s 1997 population was 987,429 / 904,831 metropolitan residents / 82,598 non-metropolitan residents: “Rhode Island Fact Sheet”, Economic Research Service (ERS): United States Department of Agriculture, (See web site at URL – <http://www.econ.ag.gov/epubs/other/usfacts/RI.HTM>)

¹⁰ According to a report on tourism industry in Rhode Island by University of Rhode Island (URI) economics professor Timothy Tyrell. Report states that tourism related industries in Rhode Island accounted for approximately 29,564 jobs in 1997. There were \$2.05 billion dollars in revenue for the Rhode Island tourism industry in 1997. Up from approximately \$1.7 billion in 1996 and \$1.1 billion in 1987 (*Source*: “Tourism brings \$2 billion to R.I.”, William J. Donovan, *The Providence Journal-Bulletin*: Friday May 8th, 1998)

¹¹ “Empirical Evidence of Public Preferences for Farmland Preservation”, Jeffrey Kline & Dennis Wichelns, *Source*: *Environmental Enhancement through Agriculture: Proceedings of a Conference*, pp. 265-274 (See *Appendix C*)

¹² *Source*: U.S. Dept. of Commerce, 1994

¹³ “Soil Survey of Rhode Island”, Dean D. Rector, Soil Conservation Service, USDA: 1975

¹⁴ Rhode Island Rural Lands Coalition, Southern Rhode Island Conservation Districts: 60 Quaker Lane, Suite 46: Warwick, RI 02886

¹⁵ See *Appendix E*

¹⁶ *Ibid*

¹⁷ In 1997, Casey Farm’s CSA operation had a gross income per unit of land equal to \$5,373 / acre. Casey Farm’s CSA operation also experienced annual retention rate of approximately 80%, in comparing 1996 and 1997 members.

¹⁸ Casey Farm offers three types of CSA shares. In 1997, the full share was \$475, the half share was \$275, and the work share was a total of 40 hours of work during the growing season.

¹⁹ Shaw’s Supermarket, 50 Ann Mary, Providence, RI 02860

²⁰ Eastside Marketplace, 165 Pittman Street, Providence, RI 02906

²¹ Casey Farm distributed weekly information sheets to its members along with the weekly assortment of produce. On these information sheets I recorded the species and weight of the weekly produce I received. I determined the amount of weekly produce I received as a half share member by using an electronic scale at Casey Farm and keeping a written record of the data. The price comparison methods I developed for the collection of original data consisted of the following steps. Step 1: Bringing the sheet with recorded data about species and quantity (numbers and weight) of CSA produce to both Shaw’s Supermarket and Eastside Marketplace in Providence. Step 2: Recording the retail price and total value of weekly assortment of Casey Farm CSA produce received each week, based on the daily prices of both supermarkets. Step 3: Calculating the cumulative retail price of all the CSA produce received from Casey Farm based on both Shaw’s Supermarket and Eastside Marketplace’s weekly prices throughout the summer and fall of 1997.

²² Shaw’s and Eastside Marketplace were chosen because they represent two supermarket categories. The two categories being a larger inexpensive supermarket (i.e. - Shaw’s and Stop & Shop) and a somewhat more upscale and more expensive supermarket (i.e. - Eastside Marketplace and Bread & Circus). Both were deemed to represent supermarkets which together serve the large majority of the metropolitan population.

²³ Local non-organic produce of various species was sold throughout the summer at both Shaw’s and Eastside Marketplace. When local produce was not available, the price of organic produce from any location was recorded. Occasionally, when neither local nor organic produce was available, the price of non-organic non-local produce was recorded. Though worth mentioning, the latter rarely occurred.

²⁴ Casey Farm had a PYO option for strawberries, tomatoes, tomatillos, peas, flowers, cherry tomatoes and certain herbs.

²⁵ See *Appendix F* for listing of specific quantities of produce used as indicators of average PYO species harvested by individual members.

²⁶ CSA farms that do not have a work share option are generally either 1) operating solely on a delivery basis or 2) simply too small to be able to afford any non-monetary payments from CSA members.

²⁷ “Community Supported Agriculture (CSA): The Producer/Consumer Partnership”, Robyn Van En & Cathy Roth, Umass Cooperative Extension System, USDA

²⁸ Ibid

²⁹ New England Agricultural Statistics 1997, Compiled and issued by the *New England Agricultural Statistics Service*, (Field office of NASS, USDA) 22 Bridge Street, 3rd Floor, P.O. Box 1444, Concord, NH 03302 – 1444

³⁰ There is no time limit or ‘expiration date’ for using one’s membership credit at Wishing Stone Farm CSA. Members can pay at any time of the year and pick-up produce from the farm stand any point thereafter.

³¹ New England Agricultural Statistics 1997, Compiled and issued by the *New England Agricultural Statistics Service*, (Field office of NASS, USDA) 22 Bridge Street, 3rd Floor, P.O. Box 1444, Concord, NH 03302 – 1444

³² *Source*: 1992 U.S. Agricultural Census: See web page at URL – <http://www.census.gov/econ/www/ag0100.html>

³³ “Rhode Island Fact Sheet”, Economic Research Service (ERS): United States Department of Agriculture, (See web site at URL – <http://www.econ.ag.gov/epubs/other/usfacts/RI.HTM>)

³⁴ See *Appendix G*

³⁵ *Rhode Island Rural Lands Coalition*, Southern Rhode Island Conservation Districts: 60 Quaker Lane, Suite 46: Warwick, RI 02886

³⁶ Green, Sorensen & Russ, Farming on the Edge American Farmland Trust, Center for Agriculture in the Environment, Dekalb, IL: March 1997

“The three basic factors taken into consideration when ranking the most threatened farmland were the quality of the farmland, the market value of agricultural production in the designated area and the regional development pressures . . . Ranking the threat to High Quality Farmland in the MLRAs (Major Land Resource Area): Market value was measured by the total agricultural market value; development was measured by the acreage of prime or unique farmland converted to urban land between 1982 and 1992; and land quality was measured by the percentage of land that was prime or unique farmland. We used a formula devised to give equal weight to all three factors: **Score** = [(market value/13,000) x (market value per acre farmland/644)] + [2.8 x (acreage of prime and urban farmland converted to urban between 1982 and 1992)] + [3.8 x (percentage of land that is prime or unique farmland)]”

³⁷ *Grow Smart Rhode Island*, Annex Station: P.O. Box 904, Providence, RI 02901-0904

³⁸ “The Consistency Doctrine in Rhode Island”, Monthly Progress Report, Report Number 366: February 1995 Division of Planning, Rhode Island Department of Administration

³⁹ Rhode Island is divided into 39 municipalities and 5 counties. Political representation and decision making is at the state & municipal level. There are no county governments in Rhode Island. Bristol, Kent, Newport, Providence and Washington counties are simply geographic divisions within the state.

⁴⁰ New England FaRMS/LAND-LINK, P.O. Box 608, Belchertown, MA 01007

⁴¹ Equity Trust, Inc. 539 Beach Pond Road, Voluntown, CT 06384