# HeartEye Village CSA 2012 Annual Report



February 7, 2013

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#### Introduction

As part of the desire for transparency and education, and because we have documented everything we have done making analysis of our efforts possible, HeartEye Village CSA would like to share our Annual Report with our members and with the wider community.

There are several reasons that we feel it is pertinent to share details about the results of our latest growing season. One important factor is that the CSA model is a relatively new marketing concept and most people know very little about it and the benefits such a model engenders. This lack of familiarity can result in participants, and would-be participants, making erroneous assumptions about the procedures and economics that make a CSA function in a sustainable manner.

Another reason is that we feel it is important for our members to understand the context behind the decisions that are made. Such decisions range from how and why crops and harvests are allocated the way they are, why changes in management strategies occur and why share prices may or may not change.

Another factor is that over the course of the season as members pick up and utilize the produce from their boxes, they may not realize how much produce they are actually receiving. As a result, participants in a CSA may not fully know how much they are saving by not purchasing organic produce in the retail sphere.

Our skills continue to grow since, while we experienced significant drought conditions this season, we were still able to meet and surpass our CSA box value expectations. In addition, 2012 marked the 2<sup>nd</sup> season that we operated a winter CSA using our high tunnel. We were especially excited to assess our progress over the 1<sup>st</sup> year of winter production. While we again experienced some success and some failures, the most significant observation regarding continued operation of the winter CSA is the substantial contribution it makes to the overall financial stability of HeartEye Village CSA.

We want to thank our members for their support and we invite you to peruse the results of what we consider another amazingly successful year. As during our first three years we are excited to have learned some valuable lessons to apply towards making our future years sustainable ones.

Sincerely,

Tracy Sweely Farm Manager

# Part 1: Production

#### **Harvest Totals**

#### Totals per crop: Main Season

A total of 2236 lbs of produce were harvested from our  $\frac{1}{4}$  acre micro-farm during the main season. We grew 8 fewer crops than we did in 2011. The primary reason for growing fewer crops is that we are doing less experimentation with crop varieties. But the drought and poor germination for certain crops such as cucumbers and winter squash was also a factor. We are sad to report that the cherry tree died this year, we suspect due to insufficient water from a broken irrigation line and because of the drought. The following chart indicates the total number of lbs harvested for each of the 43 crops grown during the 2012 season.

Arugula	56.35	Basil, Green	20.73
Beets & Greens	62.73	Beans, Yellow	51.22
Bok Choi	28.65	Beans, Green	75.76
Cabbage	21.54	Cucumber	14.02
Carrots	110.16	Eggplant, Japanese	9.62
Chard	119.94	Eggplant, Black	6.92
Cilantro	3.67	Melons	64.46
Collards	38.09	Peppers, Bell	1.21
Garlic	5.49	Summer Sq, Patty Pan	183.09
Kale	57.6	Summer Sq. Crookneck	40.25
Leeks	9.5	Summer Sq Zucchini	263.15
Lettuce, Leaf and Head	128.26	Tomatillas	41.55
Mustard	21.96	Tomatoes, Cherry	30.6
Onions, Red	44.98	Tomatoes	184.7
Onions, Yellow	166.14	Perennial herbs	4.3
Peas, Snow	10.09	Rhubarb	4.08
Radishes	37.56	Escarole	12.83
Shallots	17.18	Endive	18.64
Spinach, green	13.03	Squash Blossoms	3.11
Spinach, purple	13.44	Winter Sq.	2.26
Turnips	225.41	Celery	7.5
Basil, Ppl	4.31		

#### Total per share: Main Season

The following chart indicates the minimum total number of lbs of each crop received by half-share CSA members during the 2012 main season. At a minimum, full-share members received twice these amounts.

Arugula	2.47	Turnips	9.03
Beets & Greens	3.19	Basil, Ppl	0.09
Bok Choi	1.53	Basil, Green	1.04
Cabbage	0.74	Beans, Yellow	1.23
Carrots	3.69	Beans, Green	2.49
Chard	3.89	Cucumber	1.38
Cilantro	0.13	Eggplant, Japanese	0.14
Collards	1.61	Eggplant, Black	0.77
Garlic	0.19	Melons	2.28
Kale	2.02	Summer Sq	14.87
Leeks	0.34	Tomatillas	2.80
Lettuce, Leaf and Head	5.31	Tomatoes, Cherry	0.46
Mustard	0.55	Tomatoes	7.21
Onions, Red	1.31	Perennial herbs	0.36
Onions, Yellow	6.87	Rhubarb	0.16
Peas, Snow	0.25	Escarole	0.43
Radishes	2.59	Endive	0.56
Shallots	1.89	Squash Blossoms	0.29
Spinach, green	0.72	Celery	0.22
Spinach, purple	0.47		

### Totals per crop: Winter

A total of 333 lbs of produce were harvested during the 2012 winter season. A total of 34 crops were successfully cultivated, we provided 17 more crops than in 2011. Some crops harvested were not actually grown in the high tunnel during the winter months, but were carried over from main season production either in storage or in the ground until it became too cold for them to survive. Crop failure occurred with snow peas and beets.

Arugula	9.15	Mustard	8.57
Bok Choi	5.72	Onions, Red	10.68
Carrots	41.34	Onions, Yellow	21.37
Chard	17.01	Parsnip	2.12
Cilantro	1.27	Radishes	15.49
Collards	5.69	Spinach, green	3.98
Kale	19.5	Spinach, purple	0.52
Leeks	1.31	Turnips	46.31
Lettuce, Leaf and Head	10.6	Basil, Ppl	0.91

Basil, Green	2.2	Tomatillas	1.63
Beans, Green	2.3	Tomatoes, Cherry	9.06
Cucumber	1.79	Perennial herbs	0.54
Eggplant, Japanese	1.38	Beet Greens	2.33
Eggplant, Black	2.81	Plums	17.54
Summer Sq, Patty Pan	16.28	Winter Sq.	36.25
Summer Sq. Crookneck	0.29	Horseradish	3.08
Summer Sq Zucchini	9.11	Celery	4.66

#### Total per share: Winter

The following chart indicates the minimum total number of lbs of each crop received by half-share CSA members during the 2012 winter season.

Arugula	1.06	Turnips	4.84
Bok Choi	0.71	Basil, Ppl	0.03
Carrots	2.68	Basil, Green	0.29
Chard	1.90	Beans, Green	0.25
Cilantro	0.13	Cucumber	0.19
Collards	0.90	Eggplant, Black	0.44
Kale	2.43	Summer Sq, Patty Pan	2.06
Leeks	0.13	Summer Sq Zucchini	0.50
Lettuce, Leaf and Head	1.13	Tomatillas	0.18
Mustard	0.72	Tomatoes, Cherry	1.01
Onions, Red	1.21	Perennial herbs	0.35
Onions, Yellow	2.58	Beet Greens	0.25
Parsnip	0.23	Plums	2.00
Radishes	1.64	Winter Sq.	4.03
Spinach, green	0.46	Horseradish	0.31
Spinach, purple	0.03	Celery	0.50

# Comparables: Main Season and Winter

Because we were able to have a 17-week harvest (instead of 16-weeks) during the main season, the price of \$450 paid for a full-share breaks down to a cost of \$26.47 for each harvest box per week. The price of \$225 for a half-share breaks down to \$13.23 for each harvest box per week. For the winter CSA we had a 12-week harvest. We only had half-share boxes for the winter CSA and these were sold for \$200. This breaks down to a cost of \$16.67 per box.

As we did in last year's annual report we wanted to see how our harvests per week compared to other farm's retail prices. Over the last few years several farms from the region were polled to ascertain prices charged for each crop at farm stands and at farmer's markets. The farms polled included:

Pachamama Organic Farm Ollin Farms Isabella Farm Jay Hill Farm Honeyacre Farm My Mama's Hat Farm The Berry Patch

We also included retail prices for a few crops from Growers Organic, which is an organic produce distributor to grocery stores in Colorado. We also used a new real-time report offered by the CSU Agriculture Extension to track retail crop prices at farmers markets around the state. This last source is especially relevant for the winter CSA because crop prices generally increase during the winter months. Prices charged by the above entities were pooled to obtain an average price per lb paid for each crop in the region.

Given these figures for each crop the minimum average value of the amount of produce received by CSA Members over the course of the main season was \$625.67 for a full-share and \$312.84 for a half-share. This breaks out to \$36.80 per box for a full-share and \$18.40 per box for a half-share. Thus, over the course of the main season full-share members received \$175.67 worth of additional produce above what they paid for and half-share members received \$87.84 worth of additional produce above what they paid for.

The box value for the winter CSA is more difficult to assess since winter season crop prices are harder to come by. The CSU Agriculture Extension crop price report sited above was used for some winter crops but the report is limited in scope and thus we were unable to establish winter prices for many crops. This is especially true for "gourmet" type crops such as baby greens and baby squash. As is expected winter prices tend to be higher than main season prices so the box value that we calculated here is probably somewhat undervalued. Given this crop price issue and the snow pea crop failure, the winter CSA box value was less than anticipated. The winter CSA half-share box value was \$172.36, which is \$27.64 less than what the winter CSA shareholders paid. While we are sorry that we did not meet our winter production goals, we feel that the overabundance of produce received by winter CSA members during the main season makes up for the lower winter box value.

# Part 2: Viability

## Income and Expenses

For the first 4 years of our farming operation, total expenses were \$57,692.57 and total income was \$41,051.19. In the last two years we received \$10,856.00 in grant funds. Regular (i.e. non-grant) income for 2012 was approximately \$1250 more than the average regular income from our first three years of operation. In addition, the average regular income from our last two years of operation (2011-2012) was approximately \$2500 more than our first two years of operation (2009-2010). Income increases over the years are due to increases in farm stand and virtual farm stand sales, the addition of the winter CSA shares and a fundraiser held in 2012 for repairs to our tunnel. We have also observed a significant decrease in regular annual expenses with 2012 expenses being \$1670 less than

the average regular annual expenses for the last two years of operation (2010-2011). For fiscal year 2012 the CSA broke even.

#### Labor

Total Labor for the 2012 season was 2003 person-hours, breaking down as follows:

1488 hours performed by the farm intern313 hours performed by working shareholders72 hours performed by Farm Manager working shareholder130 hours volunteered by Farm Manager

### **Analysis**

#### **Yields**

Because of continued changes in crop space allocation and because of drought conditions, in 2012 during the main season we grew 908 fewer lbs of produce than we did in 2011. Limited reallocation of crops continued in 2012 to increase production of "lighter" crops that were more in demand and to reduce production of "heavier" crops that we were unable to market fully in previous years. But drought conditions were a greater factor for low tomato yields and for poor germination that resulted in crop failure for cucumbers, winter squash and snow peas.

In 2012 during the winter season we had 78 more lbs of produce available for the winter CSA than we did in 2011. There are several reasons for this. A couple reasons were that we had better storage conditions for heavy items like winter squash and because we harvested plums this year. We also overcame germination issues from 2011 to successfully grow carrots and cilantro during the winter this year, where we failed in 2011. But while we succeeded in germinating snow peas and beets we were unable to bring the plants to maturity. We will continue to try next year.

At the end of 2011 we realized the best method for increasing our income generally was for us to increase our yields without increasing the amount of cultivatable space. Based on the results of the Small Farm Financial Sustainability Study conducted in 2011 we used the bio-intensive technique of intercropping in 2012 in order to increase yields over previous years. As with other experimentation we've done, we had some success and some failure. Successful intercropping pairs were:

arugula with basil onions with basil lettuce with tomatoes basil with tomatoes carrots with tomatoes beets with tomatoes spinach with eggplant turnips with peppers

Unsuccessful intercropping pairs were:
onions with melons
beans with melons
onions with winter sq

Despite a fair amount of success with intercropping, drought conditions dramatically affected the gains we anticipated by using the technique. We had anticipated that successful intercropping would allow us greater yields to sell at the farm stand and allow us to recoup our start-up costs 7 years from our start date. Even though our yields were decreased due to the hot dry weather during this first year that we utilized the intercropping technique, we did meet and exceed the minimum requirements of the CSA, which is a priority for us. Thus for 2012, the intercropping technique allowed us a measure of buffer against the drought conditions, rather than providing additional income.

#### Labor

CSA operations for 2009 were found to be unsustainable and changes in labor and markets that were made in 2010 were continued in 2011 and 2012 to address shortfalls. Hiring an intern to perform most tasks in exchange for room, board, a small stipend, a season end bonus and an intensive educational experience has continued to substantially mitigate labor costs in 2012.

Regular working share hours were expected to be the same as in 2011 but not all of the working shares were taken in 2012 and many working share hours that would have normally been dedicated to farm tasks were taken up with repairs to the tunnel. Continuing to use the Farm Manager Working Share instead of hiring a Farm Manager also helps to keep expenses low. But the Farm Manager volunteer labor for 2012 was problematic. There is always a certain amount of volunteer management labor needed dependent upon the level of experience of the intern. This year though, there were also many hours spent by the Farm Manager over the weekends when the intern had time off. Mitigation of volunteer hours by the Farm Manager will be addressed for 2013, by adding more working share hours and making sure all working shares get taken.

#### Markets

Where income is concerned, markets are still being cultivated and expanded. Extending the growing season at the beginning of the year by using the high tunnel for May farm stand sales as originally planned was not an option in 2012. The reason for this was that unexpected hurricane force winds in February damaged the tunnel and we were unable to repair it until September. But as in 2011 we were able to extend the season at the end of the year allowing us to continue limited production for our small 9-shareholder winter CSA. Because of concerns about winds in the early part of 2013 we dismantled fragile parts of the tunnel to avoid any possible wind damage. We do not plan to extend the season at the beginning of the year in 2013 since high summer temperatures would require removal of the cover again before replacing it in September. Along with wind damage risks, we felt that early season sales at the farm stand would not sufficiently offset the additional stress on the tunnel cover and the labor involved in removing and replacing it.

Since the realized value of the main season CSA share between 2009 and 2011 was so much higher than shareholders paid, we did increase the number of full-shares sold in 2012 from 12.5 to 13.25. And while we did overcome some winter production germination issues experienced in 2011, we were nonetheless hesitant to increase the number of winter CSA shares for 2012. Because we are still exceeding the cost of the main season CSA boxes we could increase the # of main season CSA shares available in 2013. We may be able to

increase the number of winter CSA shares in the future if we can improve crop density in the tunnel and plans are being made to attempt to do so in 2013.

Farm stand and virtual farm stand income was lower this year than in 2011. This is primarily due to the effect drought conditions had on our yields. The farm stand regularly sold out by the end of the season, but there was just not a lot of stock. This indicates that consumers are relying on our farm stand and we hope to better meet their needs in 2013. No attempts were made to access wholesale markets in 2012 due to limited production resulting from the drought. Wholesale sales income is substantially lower than retail and so our focus remains on farm stand and virtual farm stand sales. In addition to produce sales during the harvest season, early season plant sales continued to appear to be a viable income stream in 2012. Late season cut flower sales were again attempted this year, but drought conditions and poor germination were issues so the viability of this income stream is still questionable.

#### Other Income Sources

We had anticipated incorporating the fruit share add-on again in 2012, but we did not have sufficient interest from CSA members in 2012 to meet the Ela Family Farm minimum. Ela did work with us for those who wanted to participate though and they provided a limited fruit box delivery. A small mark-up is calculated into the cost of the add-on and passed on to participating shareholders. Add-ons are a viable income stream because of the low labor investment required and we will continue to incorporate them if we can generate sufficient member interest.

Limited fundraising efforts were successful in 2012. In order to pay for unanticipated repairs to the high tunnel from wind damage, we held a movie night with a silent auction in July on landowner Susan Weems' screened porch. All who attended enjoyed this fundraiser and we did meet our fundraising goal. Because the event had a low labor investment and was quite fun, we are considering making it an annual event.

A new income stream was assessed in 2012. After preparing the soil in the farm plot we had extra compost. Because small scale gardening is a growing market trend we decided to try to prepare and sell some of our extra compost and thus we came up with HeartEye Horse Pucky Compost to sell at our farm stand during the early part of the season when we were selling bedding plants. It is too early to tell if this is a viable income stream. We will try again next year to assess whether we can sell a sufficient amount to exceed the low labor and materials investment it seems to require.

## Part 3: Strategies

# Summary

After four years of experience, research and examination we feel that the strategies that we now have in place are the most effective for eventually achieving sustainability given the amount of cultivatable space we have. As was realized in the 2011 Small Farm Financial Sustainability Study the amount of space we have to grow on (~4000 sq ft) is unsustainable in terms of meeting all start-up costs, annual expenses and paying a full-time farm manager. But with the intern and Farm Manager Working Share positions, among other

things, achievement of sustainability appears to be within reach, although unexpected expenses have and could continue to undermine our progress.

Working Share labor strategies will be altered in 2013 to mitigate the Farm Manager volunteer hours and attempts to fill all Working Shares will be made. Working Share hours will also be reallocated to ensure more weekend coverage. Finally more Working Shares will be added based on plans to increase the number of shares available.

Since yields were such that main season CSA boxes were worth more than what was charged for them, we calculated that we could add three new shares in 2013. This would bring the total number of full-shares available to 16.25. Any additional produce we are able to grow beyond fulfilling the current number of CSA Shares will be slated to sell in our farm stand. But produce slated for farm stand sales serves the alternative purpose of providing buffer against uncertain climatic conditions.

Continued use of the tunnel for winter production has proven a viable incomegenerating stream. Given that the repair cost from wind damage remains isolated and not an annual expense, the benefits of tunnel production far outweigh the low regular annual costs of operating it.

As always, we make every effort to keep expenses low and to find the best prices on annual expenses, but unexpected expenditures such as the tunnel repairs we had in 2012 are clearly a big risk. Other income streams such as add-ons, fundraising, cut flower and compost sales, should they grow substantially, provide buffer to offset unexpected expenses or when such do not occur, could be channeled to paying down start-up costs.

#### Conclusion

Each year of our first four years of operation we have made careful observations and continuously responded to the challenges we've experienced in becoming financially sustainable. While we continue to experience new challenges each season, the lessons we've learned and the changes we've made in labor, markets, methods and techniques have helped us achieve both a level of buffer against climatic challenges and unexpected expenses and brought us closer to our sustainability goals. As always, we hope our members will find that participation in our project is not only of great value to them but is also an emerging model of sustainability that they can be proud to participate in.

#### Acknowledgments

We would like to take this opportunity to profusely thank Susan Weems for making the HeartEye Village CSA possible. Because of her vision and underwriting of the start-up costs the following entities have benefited in the following ways:

The CSA members, the Boulder Valley School residents, and the neighboring community have benefited by being able to obtain our produce on-site.

From the dissemination of information about our project, the larger community continues to benefit from those who see the value and have the desire to participate in the local food movement by following our example and creating their own farms.

Finally, we would like to take this opportunity to thank our intern Dylan Zubia and our working shareholders and volunteers. Thanks so much for your efforts we simply can't do this without you!