

12-22-2009

## THE BIG GARDEN PROJECT: Omaha Community Foundation

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### Recommended Citation

Piper, R. K. and Wellman, Gerard, "THE BIG GARDEN PROJECT: Omaha Community Foundation" (2009).  
*Publications since 2000*. 421.  
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**THE BIG GARDEN PROJECT  
Omaha Community Foundation**

**Final Report  
December 22, 2009**

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## EXECUTIVE SUMMARY

This executive summary of the final report documents the major findings of interviews and site visits conducted during the summer and fall of 2009 with representatives of BIG Garden and other community gardens in Omaha. The purpose of the study is to gather qualitative information for staff and sponsors on current gardening activities and other factors, relating to effective management and the implementation of best practices.

### SUMMARY FINDINGS

The data and feedback gathered is grouped into four major sections in the body of the report: 1) Community Building and Participation, 2) Garden Organization and Operations, 3) Gardening Practices and Techniques and 4) Gardening Obstacles and Improvements. At the beginning of each section, study findings and/or recommendations for improved program performance within these specific areas are presented.

Summary findings that integrate what was learned within these four areas are as follows:

- All garden representatives except one said that “building community” was an equally- or more important purpose of the garden than the food.
- All the gardens had high praise for the BIG Garden staff and interns for their support, expertise and assistance during the 4-year incubation period.
- Chronic and serious problems exist at under-performing, and to a lesser extent at moderately- and high-performing gardens, in three major areas:
  - Leadership and Organizational Structure
  - Neighborhood Outreach and Participant Involvement
  - Internal and External Communication
- Making improvements in the quality, methods, content and effectiveness of **communication** between garden leaders and participants, with BIG Garden staff and with the surrounding neighborhood residents, seems to be the thread that ties the major problem areas together.

### RECOMMENDATIONS

- While this study did not include a detailed examination of the training, assistance, instructional materials and programming provided to the sites by BIG Garden staff, greater attention and focus on the **communication aspects** of these with garden leaders and participants seems warranted.
- In particular, the development (or improvement) of a comprehensive written, video and/or computerized curriculum, manual or guide-book would provide a solid foundation for and means of improving communication. Separate elements or chapters devoted to

the main aspects and challenges of community gardening (e.g., leadership, organizational factors and meetings, neighborhood outreach, gardening practices, food canning and other classes, etc.) would be especially beneficial.

- The creation and effective use of such a package of knowledge would help insure the consistency and comprehensiveness of training, assistance and communication between BIG Garden staff /interns and garden leaders and participants. It would also provide a vital tool that could be readily accessed by garden sites when/if BIG Garden staff are not immediately available to assist or in the event of communication difficulties.
- Moreover, the development and effective use of a standardized community-gardening curriculum would provide a flexible framework to address the serious and chronic problems identified in this report (see the specific findings and recommendations within the 4 sections of the body of the report), as well as improving or adding new dimensions to existing programming, training, classes and assistance.

## INTRODUCTION

This final report summarizes the major findings of interviews and site visits conducted with representatives of BIG Garden and other community gardens in Omaha.<sup>1</sup> The purpose of the study is to gather qualitative information for staff and sponsors on current gardening activities and other factors, relating to effective management and the implementation of best practices.

The data and feedback gathered is grouped into four major areas: 1) Community Building and Participation, 2) Garden Organization and Operations, 3) Gardening Practices and Techniques and 4) Gardening Obstacles and Improvements. At the beginning of each section, summary findings and/or recommendations for improved program performance are presented.

## STUDY FINDINGS

### Community Building and Participation

Garden representatives were asked, “What do you think is the main purpose of the garden? Is it about more than just the food?” The following are typical of the responses:

*“Outreach to the community. In this neighborhood, we are able to touch folks and be good neighbors. [Our business] previously had not been involved, now we are able to give back to the neighborhood. The food is secondary.”*

*“Most of the [youths in our community garden program] do not have access to fresh fruits and vegetables. There are only two grocery stores in a 7-mile radius. Many youths shy away from fresh veggies because they’re unfamiliar with them. We’re sending the produce home with them.”*

*“Growing food is the main purpose, but a close-second is growing community and a close- third is the kid’s garden. The kid’s garden is fairly new, but strong. The garden helps grow community through [garden-related] neighborhood potlucks, clean-up days, and having volunteers come in from outside.”*

*“The food is nice and we share it, but when you’re not in an affluent area, you have to do things that are positive and affordable. Gardening is something that people in the neighborhood can do. There is a language barrier, but gardening is a universal language..... It’s been a major community builder.”*

*“Building community and providing food for the community.....any families in the neighborhood can come in and get food if they need it.”*

The remainder of this section compares the participant responses from gardens selected by BIG Garden staff and researchers as representative of relatively “higher-performing” and “lower-

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<sup>1</sup>The interview protocol and survey instrument are provided in the Appendix.

performing” efforts.<sup>2</sup> The comparisons are intended to help identify patterns that may be important in future programming and practices.

Tables 1-5 show the different types of representative gardens and the variables examined. Study variables include: 1) neighborhood vs. external participation, 2) demographics/neighborhood representativeness, 3) gardening experience, 4) reasons for participating, and 5) participation/drop-off problems.

## Summary Findings

- All garden representatives except one said that “building community” was an equally- or more important purpose of the garden than the food. The representative from an agency-based youth garden that said the food and learning about healthy/nutritious food was the primary purpose.
- The level of participation by neighborhood residents in which the garden is located **does not** seem to be a factor in whether the garden is performing at higher or lower levels. Higher performing BIG Garden and non-Big Garden sites ranged from 40% to 100% neighborhood participation, while moderate-lower performing sites ranged from 95% to 100%.<sup>3</sup>
- Similarly, the representativeness of garden participants of the surrounding neighborhood (demographic characteristics such as racial/ethnic group composition and levels of income) **does not** seem to be a controlling factor. Both higher performing gardens and moderate-lower performing had representative and non-representative racial/ethnic and income-level compositions.
- The levels of gardening experience and reasons for gardening were mixed and varied considerably for all performance groups. No patterns were identified that would be immediately useful for programming improvements.
- In examining participation problems and drop-off, higher performing gardens either experienced no or nominal problems that were corrected or dealt with as “natural” elements of community gardening. One lower performing garden (which is in its fourth year of operation) however, still experiences drop-off and non-participation as a major problem, to the extent that were it not for the work of interns and agency

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<sup>2</sup> “Higher-performing” gardens are those identified by BIG Garden staff as generally well-organized, functioning and producing at levels that meet or exceed expectations, while “lower-performing” gardens generally are not. The original study design envisioned inclusion of 4-5 higher-performing and 4-5 moderate-lower performing gardens of different types (varying by age and organizational type [church-based, nonprofit agency-based, community/neighborhood group-based, etc] ) in the study. Despite exhaustive efforts by BIG Garden staff and researchers, however, only 5 BIG Garden and 2 non-BIG Garden interviews and site visits were completed.

<sup>3</sup> One garden initially identified as higher-performing was re-classified by researchers as “moderately-performing” due to the under-utilization of available plot-space (below 50%) and related-difficulties it continues to experience obtaining neighborhood involvement and participation.

volunteers doing the work that should have been done by the gardeners, it would likely have failed to produce.

While both higher and moderate-lower performing gardens experienced drop off, it was only for a lower-performing garden that this was a major problem, to the extent that it threatened the continuing operation and complete failure of the garden itself. This raises a “red flag” that this issue is worthy of greater programming attention.

## Recommendations

- The problem of severe participation drop-off, as identified above, should be given greater attention by BIG Garden staff and sponsors, and especially if the issue is not resolved or controlled by/during the second year of operation. Higher performing gardens stressed the importance of **early communication** with participants as to the requirements and expectations of gardeners.

They also cited the great value of maintaining lists of phone numbers of the participants, to give them gentle “nudges” if they are not performing as required, as well as a “waiting list” of potential replacements if needed.

- Another strategy in dealing with drop-off and participation problems, cited as being successful by the higher-performing non-BIG Garden representatives, is to require a greater “buy-in” of participants. This might take the form of nominal participation fees (perhaps \$10-\$15 or other barter arrangement in place of cash) for each season.

The logic here is that if participants have more “skin in the game” the more likely they will be to make the most of their investments, and the less likely it is they will not live up to their commitments. One non-BIG Garden site also requires each participant to contribute a minimum of 4 hours each season to the garden for weed pulling, general maintenance or improvements or other needed tasks.

- The feedback and observations provided in Column 4 of the tables in this and following sections may also be useful to BIG Garden staff and sponsors, in addressing additional program issues, problems or obstacles that were not identified in this report.

**Table 1 Neighborhood vs. External Participation**

Garden Performance	Age of Garden	Type of Garden	Neighborhood vs. External Participation
1. Higher Performance	Year 1	Nonprofit Agency-Based	All who participate in the program are from the neighborhood and nearby zip codes. Early volunteers for initial construction came from the neighborhood.
2. Higher Performance	Year 2	Community/Business-Based	This year 60% of participants are employees, volunteers or community-program participants tied to our business and 40% are from the surrounding neighborhood. Our goal next year is to involve more neighbors and provide them with beds.
3. Higher Performance	Year 3	Church-Based	About 50% are from the immediate neighborhood and not involved with the church and 50% are from the church; so overall

			probably more than 75% are from the neighborhood.
1. Moderate Performance	Year 4	Community/ Business- Based	All live within 1-mile of the garden.
2. Lower Performance	Year 4	Nonprofit Agency- Based	About 95% are from the neighborhood and anyone can come in to harvest.

**Table 2 Demographics/Neighborhood Representativeness**

Garden Performance	Age of Garden	Type of Garden	Demographics/ Neighborhood Representativeness
1. Higher Performance	Year 1	Nonprofit Agency- Based	Program is for young persons, but majority are low-income like the neighborhood and 97% are African American (which is higher % than the neighborhood).
2. Higher Performance	Year 2	Community/ Business- Based	The participants are quite diverse as is the surrounding neighborhood. The racial breakdown of the participants is about 50% white and 50% non-white; 75% male and 25% female.
3. Higher Performance	Year 3	Church- Based	About 1/3 White, 1/3 Guatemalan and 1/3 Mexican. Mostly male gardeners with ages ranging from late 20's - 70's, the majority in their 40's and 50's.
4. Moderate Performance	Year 4	Community/ Business- Based	All are white, so is not representative of a very diverse neighborhood. Male/female ratio is about 50-50 and age ranges are from mid-20's to upper 50's.
5. Lower Performance	Year 4	Nonprofit Agency- Based	Almost all are African American, but also an occasional white or Asian family participates. About 60% are males and 40% are females.

**Table 3 Gardening Experience**

Garden Performance	Age of Garden	Type of Garden	Gardening Experience
1. Higher Performance	Year 1	Nonprofit Agency-Based	None – participants had no experience even eating fresh vegetables from a garden—for some even tomatoes were new.
2. Higher Performance	Year 2	Community/ Business-Based	Level of experience among participants is quite mixed also, ranging from none, to a little to one person who has always had a garden. Overall, 75% could be classified as relatively inexperienced.
3. Higher Performance	Year 3	Church-Based	Most have had backyard plots and are used to gardening.....but not community gardening.
4. Moderate Performance	Year 4	Community/ Business-Based	It is mixed, some have gardened before and some have not...none have community gardened before.
5. Lower Performance	Year 4	Nonprofit Agency-Based	About 75% have gardening experience.



**Table 4 Reasons for Participating**

Garden Performance	Age of Garden	Type of Garden	Reasons for Participating
1. Higher Performance	Year 1	Nonprofit Agency-Based	Part of larger youth program.
2. Higher Performance	Year 2	Community/Business-Based	Very mixed also, for some specific veggies, some for fun, enjoyable, stress reliever, a completion. Not really about “sustainability” though, given the demographics of transient neighborhood and the program participants.
3. Higher Performance	Year 3	Church-Based	Because they want to get to know people and this is not intimidating or threatening like formal meeting or gatherings can be where language may be a barrier.
4. Moderate Performance	Year 4	Community/Business-Based	None out of necessity for food. Other reasons are mixed, some as a hobby for enjoyment, some for environmental/sustainability reasons, some for desire for community and relationships with others.
5. Lower Performance	Year 4	Nonprofit Agency-Based	It is a mixture of the recognition of the real need for food itself and also for healthy/nutritious food.

**Table 5 Participation/Drop-Off Problems**

Garden Performance	Age of Garden	Type of Garden	Participation/Drop-Off Problems
1. Higher Performance	Year 1	Nonprofit Agency-Based	No, participation levels and interest have not dropped.
2. Higher Performance	Year 2	Community/Business-Based	It is a medium/nominal problem; probably at a level one would expect as newness wears off and weeding and bed maintenance replaces the fun and excitement of planting. Peaks and valleys are to be expected throughout the year.
3. Higher Performance	Year 3	Church-Based	Had a problem the first 2 years, but as same participants returned year after year, we call them and give a nudge or they ok others to harvest or everyone pitches in to solve any remaining problems communally. So overall it is not a major problem, just something that gets attention and action as a community as needed.
4. Moderate Performance	Year 4	Community/Business-Based	Yes, especially during the middle of the season when it is hot absenteeism is a problem.....not a problem during planting and harvest. This would be a major problem were it not for interns and volunteers who handle and solve weed control problems in the beds.
5. Lower Performance	Year 4	Nonprofit Agency-Based	Has not been a problem.....all gardeners are ones that have been here in prior years.....and is a relatively-small garden.

**Garden Organization and Operations**

As in the previous section, here we compare the participant responses from relatively “higher-performing” and “moderate-lower performing” gardens. Table 6 shows the different types of gardens and the variables examined: 1) leadership and organizational factors, 2) recruitment and the sufficiency of participants, 3) neighborhood/organizational involvement and 4) support and benefits to the neighborhood/community.

## Summary Findings

### *Leadership and Organizational Factors*

- Leadership and organizational structure varied considerably among higher performing gardens, to the extent that no overall patterns of leadership, structure or communication through regular meetings would necessarily predict high performance. The moderate-lower performing gardens, however, both presented examples with little structure, no or very few meetings and loose or incomplete leadership patterns.
- One of the lower-performing gardens (the fourth year garden with the drop-off problem described above) raised two other “red flags.” First, the gardeners are described as an “intimate group,” which implies that it is perceived by the leadership as only another component (as opposed to **the integral component**) of the garden operation. As such, the gardeners are treated to some extent as “outsiders” to the garden operation, while the leader is the agency-head who coordinates and communicates with other participating agencies, and to a much lesser extent (if at all) with the gardeners.

Second, this garden does not have any structure or formal meetings with or among the gardeners, although it does have weekly communication and contact with the participating agencies. While such loose structure, communication and leadership style seems to work at some higher-performing garden sites, it is clear that these are likely contributing factors to the severe drop-off, maintenance and performance problems at this site.

### *Recruiting Participants*

- In general, the garden representatives at all performance levels do not view the recruitment of additional gardeners as significant problems. Most said they had just the right number or sufficient participants and/or that they could accommodate more if more people expressed interest in participating.
- One year-2, higher performing garden has plans to continue to expand outreach efforts to the surrounding neighborhood to increase involvement.....and believes more will also naturally occur in year-3. One moderately performing garden is operating at below 50% plot-capacity and said they could have probably used more participants. However, the representative did not see this as a major problem and although they would like to have greater involvement by people in the neighborhood, they do not seem to know how to generate it.

### *Neighborhood-Organization Involvement*

- All higher performing gardens believe they are supported by the surrounding neighborhoods, although one garden would like to see greater outreach and involvement in subsequent years.
- The moderately-performing garden representative believes the neighborhood is indifferent and the garden seems “blocked” or otherwise unable to make connections to it. The lower performing garden believes it receives no support from the neighborhood and has difficulty communicating with it.
- Clearly, the low levels of support by and involvement and communication with the surrounding neighborhood is highly-likely to be related to the lower performance of the garden.

### *Benefits to the Neighborhood*

- All gardens cited benefits to the neighborhoods in which they are located. Most identified a reduction in crime and vandalism and enhanced beautification. Responses are summarized in Table 6, Column 4, Item 4, below.

## **Recommendations**

### *Leadership and Organizational Factors*

- A key factor cited by many of the higher-performing gardens to address leadership and organizational problems, was the selection of a garden committee to hold regular meetings and the election of a gardener as a leader/director to serve a 1-year term (or longer). One higher performing garden also selected a leader for each of the major ethnic/racial groups participating (e.g. whites, Guatemalans, Mexicans).
- Higher performing gardens also typically held at least monthly meetings of gardeners, as well as larger community gatherings, festivals and pot-luck dinners.
- As with participation problems documented in the previous section, the BIG Garden should focus extra attention on year 1-2 gardens that are still experiencing these basic leadership and organizational problems. Select questions from the survey instrument used in this study could be administered at the end of each season as part of or along with the existing collection of quantitative production data, to identify gardens that are having chronic problems.

### *Recruiting Participants*

- If generating higher numbers of neighborhood gardening participants is a priority for BIG Garden staff and sponsors, this should be **strongly communicated** to all

garden sites and/or additional attention should be paid to sites that indicate a willingness and capacity for more gardeners.

- As with the participation, leadership and organizational problems described above, strategies and techniques for improved recruitment should be presented by BIG Garden staff or other experts at organizational meetings prior to each growing season.
- The most important elements and content of presentations on problem areas (and perhaps even gardening basics, trouble-shooting and other programming education) should also be incorporated into written or video materials distributed to leaders at each site.

If such materials are already provided to beginning and established gardens, they should be reviewed and re-emphasized with under-performing gardens. If such materials are not available, they should be obtained or produced for garden leaders and participants to study and follow.

*Neighborhood-Organization Involvement*

- An excellent resource for community outreach materials and expertise is The Neighborhood Center located within the UNO Collaborating Center (561-7569 or 561-7582).

**Table 6 Garden Organization and Operation Issues**

<b>Garden Performance</b>	<b>Age of Garden</b>	<b>Type of Garden</b>	<b>1. Leadership/Organizational Factors</b> <b>2. Recruiting/Sufficient Participants</b> <b>3. Improving Neighborhood/Organizational Involvement/Support</b> <b>4. Benefits to Neighborhood/Community</b>
1. Higher Performance	Year 1	Nonprofit Agency-Based	1. N/A 2. We have just the right number of participants 3. We believe neighborhood supports us watches out for us. 4. Since garden is there they are watching over us and we have had no vandalism and trash dumped there as a result (and this was constant before the garden). Garden provides affordable learning about self sufficiency and other knowledge.
2. Higher Performance	Year 2	Community/Business-Based	1. No real structure or meetings. 2. We have 20-25 gardeners now, but more is always better, 35-50 would be great. Will have neighborhood party at end of year and hoping more neighbors will step up and participate. 3. We would like to see more involvement and programming to spark that: kids' clinics, farmers' market, gardening-cooking-canning classes, etc. 4. Not just a vacant, trash-filled lot anymore.....something pretty, alive and amazing. Neighbors watch out and call us or police, no more fires, less graffiti, it's something nice for families.
3. Higher Performance	Year 3	Church-Based	1. Have leaders from each of 3 ethnic/racial groups, meetings at start of season and harvest festival at the end. Also have a phone list of all members that is essential for problem-solving and trouble-shooting during the year.

			<ol style="list-style-type: none"> <li>2. Recruiting is by word of mouth. We have right amount, but keep list when enthusiasm drops or we need replacements. We could and might add more plots in the future.</li> <li>3. It definitely gets enough support and involvement from the community.....gardening is group work and this promotes word-of-mouth participation by the community.</li> <li>4. Garden has eliminated graffiti problem of the past.....it is manned at odd hours, so interrupts usual flow of criminal activity.</li> </ol>
4. Moderate Performance	Year 4	Community/ Business- Based	<ol style="list-style-type: none"> <li>1. One person governs, oversees and tries to get people what they need, no real meetings or structure; each person oversees their own plots. Seems to work fine the way it is.</li> <li>2. Recruiting has always been word-of-mouth and through the business. Could have used a few more participants this year; less than 50% of plots are utilized.</li> <li>3. The community seems to be indifferent, everyone knows garden is here, but people seem blocked somehow.</li> <li>4. The garden provides a quiet, cozy little spot and there is no crime ever. Don't really know if garden affects families or sense of community in other ways.</li> </ol>
5. Lower Performance	Year 4	Nonprofit Agency- Based	<ol style="list-style-type: none"> <li>1. The leader of our agency is boss of the garden, the common denominator among participating agencies and the gardeners, who are an intimate group. There's weekly contact among the agencies, but no formal meetings or structure for the garden.</li> <li>2. There was some attempt to recruit and canvass with flyers, but fell through due to poor communication with BIG Garden and the gardeners, especially with problems of keeping gardening dates and times as scheduled. We have sufficient participants, but if there are more wanted to come in, we have the space for more plots.</li> <li>3. There is no support from the neighborhood and we need to be more-timely communicating with neighborhood.</li> <li>4. No vandalism to our property occurred this year, may be linked to garden, but unsure. Garden helping us to emerge as a true community center. Would like to get adults gardening alongside our youth program.</li> </ol>

## Gardening Practices and Techniques

As in the previous sections, here we compare the participant responses from relatively “higher-performing” and “moderately and lower performing” gardens. Table 7 shows the different types of gardens and the variables examined: 1) most successful crops and gardening practices, 2) satisfaction with quality and quantity of produce, 3) introduction of new crops, practices and techniques and 4) distribution of produce.

### Summary Findings

#### *Most Successful Crops and Gardening Practices*

- The most successful crops at each site are listed in Table 7, Column 4, Item 1, below.

*Satisfaction with Quantity and Quality of Produce*

- All sites, except one, were either satisfied or very satisfied with the quantity and quality of the produce. The site that was not satisfied was a year-1, higher performing garden that was not pleased with the several types of crops grown (tomatillos and kale, which were disliked by participants who did not know what to do with them). The feedback from each site is summarized in Table 7, Column 4, Item 2, below.

*Introduction of New Crops, Practices and Techniques*

- All gardens made numerous suggestions regarding the introduction of new crops and desire for programming or classes on canning, composting, gardening basics and planting, insect control etc. These are summarized in Table 7, Column 4, Item 3, below.

*Distribution of Produce*

- Virtually all of the food produced stays within the communities in which the gardens are located and with the gardeners, families, volunteers and staff that produced it. A small percentage (perhaps 25%) at two sites is canned or processed for later use.

**Table 7 Gardening Practices and Techniques**

<b>Garden Performance</b>	<b>Age of Garden</b>	<b>Type of Garden</b>	<b>1. Most successful crops and gardening practices. 2. Satisfaction with quantity and quality of produce. 3. Introducing new crops, practices and techniques. 4. Where does most produce go?</b>
1. Higher Performance	Year 1	Nonprofit Agency-Based	<ol style="list-style-type: none"> <li>1. Tomatoes and greens</li> <li>2. No, tomatillos and kale were un-liked and no one knew what to do with it. Tomatoes and broccoli were most popular.</li> <li>3. Would like to add lettuce, potatoes, tomatoes, zucchini, peas, beans and carrots. Our raised beds work better than planting in soil as in the past and with weed control; BIG Garden, Mutual and agency staff helped build them.</li> <li>4. Most food goes home with youth participants, the rest goes home with the staff. None is canned or processed, but we are introducing a canning class.</li> </ol>
2. Higher Performance	Year 2	Community/Business-Based	<ol style="list-style-type: none"> <li>1. By far tomatoes and also tomatillos.</li> <li>2. Yes, satisfied.</li> <li>3. More ethnic and soul-food crops, greens, mustard, kale, chard, turnips, cilantro and onions. Would like to see more programming provided on gardening practices and techniques. Also rain-barrel practices.</li> <li>4. Some food is donated to neighborhood families, some goes to volunteers, some to gardeners. This would be a good year for canning programming as will be bumper crops. Forms should track where food goes, not just how much is produced.</li> </ol>
3. Higher Performance	Year 3	Church-Based	<ol style="list-style-type: none"> <li>1. Tomatoes, peppers, peas, broccoli and cucumbers. Harvesting practice has improved dramatically this year, greatly reducing rotting and waste of food.</li> <li>2. Definitely satisfied with quantity and quality improved as</li> </ol>

			<p>well.</p> <p>3. String-beans and hybrid crops to improve quality; also some florals and groundcover. Would like to see a composting class added to programming.</p> <p>4. Mostly all personal consumption by gardeners. This will be first year we will sell some. Perhaps about 25% is canned for later use, mostly tomatoes.</p>
4. Moderate Performance	Year 4	Community/ Business- Based	<p>1. Tomatoes, tomatillos and strawberries.</p> <p>2. Yes, there is plenty of produce for everyone to share and it is very, very good quality.</p> <p>3. Greens and crops that can be harvested continually throughout the year. Different crops besides common ones-maybe herbs. Classes on cooking, planting and gardening basics, insect control, canning and composting.</p> <p>4. All food stays in neighborhood with gardeners and friends. Would like to see salsa canned or frozen, beyond that don't know.</p>
5. Lower Performance	Year 4	Nonprofit Agency- Based	<p>1. Tomatoes, sweet potatoes, potatoes, okra, greens, lettuce.</p> <p>2. Yes, satisfied.</p> <p>3. Other types of beans, crowder and purple-hull peas, mustard greens and purple onions. Using hay to keep weeds down worked great!</p> <p>4. Most food stays in the neighborhood and it is more beneficial to get food into the homes of people who are gardening. About 25% is canned or processed for later use, would love to see this expanded.</p>

## Gardening Obstacles and Improvements

As in the previous sections, here we compare the participant responses from relatively “higher-performing” and “moderately and lower performing” gardens. Table 8 shows the different types of gardens and the variables examined: 1) most important factors for garden success, 2) largest obstacles overcome, 3) greatest obstacles remaining and 4) final comments.

### Summary Findings

#### *Most Important Factors for Garden Success*

- Most garden representatives cited buy-in from the community/neighborhood, volunteers and importance of BIG Garden staff, interns and expertise as critical to their success. The feedback and comments from each site are summarized in Table 8, Column 4, Item 1, below.

#### *Largest Obstacles Overcome*

- Gardens at all performance levels cited **communication problems** as the largest obstacles they have had to overcome to date. One higher performing, year-1 garden cited communication difficulties with BIG Garden, especially after the master gardener who made initial contacts and decisions with gardeners was no longer available to them, which seriously delayed planting certain crops.

A moderate-lower performing garden also cited **communication difficulties** with BIG Garden (also see Table 6, Column 4, Item 2) that impacted neighborhood recruiting, created scheduling problems with the gardeners and caused planting delays.

#### *Remaining Obstacles Facing the Gardens*

- Both higher and moderate-lower performing gardens said doing additional outreach to, improving communication with and generating more interest among the neighborhood residents were the greatest obstacles they still face.
- Two higher performing and one moderate-lower performing gardens also cited the need for additional resources and funding to cover improved programming (which they feel would help generate more interest and involvement) and operations.

#### *Final Comments*

- All the gardens took this opportunity to once again praise the BIG Garden staff and interns for their support, expertise and assistance during the 4-year incubation period. (One also took the opportunity to ask for help with ground cover that they have not been able to secure thus far.)
- While none of the gardens raised the issue, researchers wondered what might be done to prepare, track and further assist gardens post-incubation.
- One non-BIG Garden site in its 15<sup>th</sup> year of operation stressed the importance of acquiring ownership of their land, construction of tool sheds and a house on one of the lots for long-term stability and asset development. The house has become a vital neighborhood center for a wide-variety of community activities and projects and has been invaluable in improving communication with and outreach to the surrounding neighborhood and population.

## **Recommendations**

#### *Remaining Obstacles Facing Gardens*

- The findings on the most important obstacles still facing BIG Garden sites (improving neighborhood outreach and resolving communication problems) reiterate and re-emphasize different aspects of the same basic problems identified in the previous sections of the report (leadership, organizational factors, recruitment and improved programming).
- Making improvements in the quality, methods, content and effectiveness of **communication** (between and among garden leaders and participants, BIG Garden staff and the surrounding neighborhood residents), seems to be the thread that ties all the identified problem areas together.



While this study did not include a detailed examination of the training, assistance, instructional materials and programming provided to the sites by BIG Garden staff, greater attention and focus on the communication aspects of these to garden leaders and participants seems warranted.

- In particular, the development (or improvement of ) a comprehensive written, video and/or computerized curriculum, manual or guide-book, with separate chapters devoted to the main aspects and challenges of community gardening (leadership, organizational factors and meetings, neighborhood outreach, gardening and food – processing practices, etc), would provide a solid foundation for and means of improving communication.

The creation and effective use of such a package of knowledge would help insure the consistency and comprehensiveness of training, assistance and communication between BIG Garden staff /interns and garden leaders and participants. It would also provide a vital tool that could readily be accessed by garden sites when/if BIG Garden staff are not immediately available to assist or in the event of communication difficulties.

Moreover, the development and effective use of a standardized community-gardening curriculum would provide a flexible framework to address the serious and chronic problems identified in this report, as well as improving or adding new dimensions to existing programming.

**Table 8 Gardening Obstacles and Improvements**

<b>Garden Performance</b>	<b>Age of Garden</b>	<b>Type of Garden</b>	<b>1. Most Important Factors For Garden Success to Date 2. Largest Obstacles Overcome to Date 3. Greatest Obstacles Still Facing Garden 4. Final Comments</b>
1. Higher Performance	Year 1	Nonprofit Agency-Based	<ol style="list-style-type: none"> <li>1. Volunteers, buy-in from community and BIG Garden leadership, support and experience.</li> <li>2. Perhaps planting more-simple vegetables in first year. That the BIG Garden master gardener was not available after determining what was to be planted and some crops were planted too late.</li> <li>3. Funding to cover garden and program costs to continue planting. No obstacles with staffing or community participation.</li> <li>4. We have had great support, the staff is very flexible in working with our youth.</li> </ol>
2. Higher Performance	Year 2	Community/Business-Based	<ol style="list-style-type: none"> <li>1. All (employees, volunteers, agency participants, neighbors) bought into it, due to the excitement it generated. Garden activity is relaxing, stress-reliever and is opportunity to integrate fun, pleasure and passion into the workplace. [Perhaps a good practice for any business?]</li> <li>2. Maintaining communication and clearing up misunderstandings were major obstacles with gardeners who were in and out.</li> <li>3. Doing outreach to neighborhood, getting and keeping folks involved. [see city sprouts, etc]</li> <li>4. Because we're nonprofit, we don't always have the resources needed. It is nice to have BIG Garden's 4-year incubation support to sponsor the community. [Does anything need to be done for post incubation period? Track how they do after year-4.....do they still need some assistance or guidance or resources? If not BG,</li> </ol>

			Community Garden Association?]
3. Higher Performance	Year 3	Church-Based	<ol style="list-style-type: none"> <li>1. One, the food that comes out is high quality and all plots produced (reward for effort). Two, the interaction with and support of BIG Garden staff who are very helpful. Three, the community spirit and effort. Garden has been catalyst for beautification and several other church programs at really low cost.</li> <li>2. Overcoming the naysayers and bureaucratic worriers who had to give permission.</li> <li>3. Really just keeping up with weeding and normal maintenance.</li> <li>4. Asked and asked for floral decoration and ground cover this year but didn't receive anything. Would like to see if there's anything that garden leader could do through BIG Garden to plant rose moss and ground cover next year. We want people to see improvement on the lot over the next 10-20 years, want to beautify and plant things other than food.</li> </ol>
4. Moderate Performance	Year 4	Community/ Business-Based	<ol style="list-style-type: none"> <li>1. The gardeners' consistency in taking care of their garden plots....they really want to garden.</li> <li>2. Insects and location (people live close, but not that close.....there is space for a lot more people to participate).</li> <li>3. Sustainability—being able to ideally work within the community, if people could take care of everything themselves and didn't need BIG Garden interns. Like teaching people how to save seeds and take care of their space by themselves in the long-term.</li> <li>4. This is a really good garden spot, a welcoming, cozy spot. Wish the business customers could know there's a garden out back – we need more visibility.</li> </ol>
5. Lower Performance	Year 4	Nonprofit Agency-Based	<ol style="list-style-type: none"> <li>1. Having the knowledgeable BIG Garden interns here for guidance and advice, during planting, plant selection and harvest.</li> <li>2. Personnel problem with master gardener and no communication with BIG Garden were major obstacles during planting this year.</li> <li>3. Generating more interest in the community; can't seem to get immediate neighbors interested or to participate.</li> <li>4. We need help and funds to have someone teach on-site nutrition, planting, canning, etc.</li> </ol>

## APPENDIX

### **BIG Gardens: Evaluation of Community Gardening in Omaha Site Visit and Interview Information Protocol**

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#### **MEMORANDUM**

DATE: July 17, 2009

TO: BIG Garden Site Coordinators/Representatives

FROM: Gerard Wellman, R.K. Piper

RE: Protocol for Gathering Program Information from BIG Garden Participants

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Our general objective will be to gather qualitative information at up to eight (8) BIG Garden and two (2) non-BIG Garden sites on gardening activities and other factors relating to the effective management and best practices of community gardens. The collected qualitative data will then be used in a comparative analysis of quantitative outcome and garden production data.

Our strategy will be threefold. First, identify the most important gardening factors and activities relating to the placement, volunteer pool, management, operations and productivity of representative types of community gardens (e.g. church-based, agency-based, new [1<sup>st</sup> or 2<sup>nd</sup> year], established [3<sup>rd</sup> or 4<sup>th</sup> year], etc.). This information will be collected via direct observations during site visits and through interviews conducted with garden coordinators/representatives.

Second, link the identified gardening factors and activities to BIG Garden staff perceptions of gardens that are relatively “successful” or “unsuccessful.” Third, link the qualitative information gathered to the quantitative outcome data collected by BIG Garden site coordinators and staff during the current and two previous (2007 and 2008) years.

### **Big Gardens: Evaluation of Community Gardening in Omaha Site Visit and Interview Information Protocol**

**Garden Location: TBD**

#### Initial Observations and Interview Questions

1. General Appearance of the Garden: (Neatness, Cultivation, Organization, Atmosphere, etc.)
  
2. Level and Types of Activities:

3. Other Observations:
4. What do you think is the main purpose of the garden? Is it about more than just the food?
  - a. How did you become involved in the garden? What drew you here? Why are you gardening?
5. Are the people who participate in the garden mostly from the surrounding neighborhood or do they come from elsewhere?
  - a. Probe: What percentages come from the surrounding neighborhood(s) and from somewhere else? Where are they coming from?
6. Are there different types of people, male or female, ethnic or racial groups, different age groups that garden here?
  - a. Probe: Are they representative of the types of people that live in the surrounding neighborhood(s)? How do the different types or groups of people get along? What are their relations to each other?
7. What are the participants' levels of previous gardening experience? What about previous community gardening experience?
8. Why do you think most people are gardening here?
  - a. Probe: To save or make money? For good/nutritious food? As a hobby? Sustainability concerns? What do you think are the next most-important reasons that people garden here?

9. Does the garden have a problem with people beginning to garden in the spring, but then not staying involved throughout the growing season?
  - a. Probe: How big a problem is this and what do you think should/could be done to improve the problem?
  - b. Are there other areas where you'd like to see greater involvement by the participants?

#### Garden Organization and Operations

10. How are the leaders of the garden chosen and how is it organized?
  - a. Probe: Do you have regular meetings? How are decisions made?
  - b. Are there any improvements in managing or administration of the garden that you think would make the garden better?
11. How do you go about recruiting garden participants?
  - a. Probe: How many gardeners are involved? Do you have enough participants? Too many? Are there people in the neighborhood who'd like to participate but can't because of lack of space?
12. Do you think the garden gets enough support or involvement from the surrounding community or the organizations involved? What more might they do to make the garden better or more productive?

13. Besides the food produced here, does the garden provide other things to the neighborhood and community?

a. Probe: For example, do you think it has an impact on crime?

b. Does it affect families or the sense of community itself? Are there other impacts?

#### Gardening Practices and Techniques

14. What are the most “successful” crops grown in the garden? What are the most-widely used and “successful” gardening practices?

a. Probe: How are plots organized? How is work divided? Who decides what practices are used (i.e. use of chemicals or organic methods)?

15. Are you and most participants satisfied with the quantities of produce that come out of the garden? What about with the quality of the harvest?

16. Are there any particular crops you like to see introduced or expanded that would make the garden more productive or beneficial?

17. Are there any practices or techniques you’d like to see employed or expanded that would improve the garden?

18. Where does most of the food that is grown in the garden go?

a. Probe: Does most of it stay in the neighborhood for personal consumption? Is some sold in the neighborhood? Is it taken outside for consumption, donation or for sale?

- b. What proportion of the food would you say is canned, frozen or dried for later consumption? Would you like to see these types of practices introduced or expanded?

### Gardening Obstacles and Improvement

19. What do you think are the most important factors (things), either in the garden itself, the neighborhood or the larger community, that have helped the garden achieve the success it has thus far?

- a. Probe: What are the biggest obstacles the garden has had to overcome to get to where it is today?

20. What do you think are the greatest obstacles the garden still faces? What could be done about these obstacles to achieve better outcomes in the future?

21. Finally, is there anything else you'd like to tell us about the garden project, the support you do or do not receive, or anything else?

## REFERENCES

1. “Continuous Productive Urban Landscapes” by Andre Viljoen, Architectural Institute, 2006.
2. “Seeds Save Me” by Gordon Reeder, *The Practical Farmer*, Vol. 24, #1, Winter 2009.
3. “Ten Things To Start a Community Garden” by Walter Mosley, *The Nation*, Sept 2009.
4. “Street Farmer” by Elizabeth Royte, *New York Times*, July 1, 2009.
5. “Growing Their Own” by Sally Worley, *Practical Farmers of Iowa*, 2009.
6. “Square Foot Gardening” by Mel Bartholomew, Rodale Press, 1981.
7. “For Hunger Proof Cities: Sustainable Urban Food Systems” by Mustafa Koc (ed), International Development Research Center, 1999.
8. “On Guerrilla Gardening: A Handbook for Gardening Without Boundaries” by Richard Reynolds, Bloomsbury, 2008.
9. “Urban Gardening Therapeutic Use: Restorative Commons” by Anne Wiesen, USDA Forrester Services, 2009.
10. “Urban Community Gardening” by Ellen Kirby, Brooklyn Botanic Garden, 2008.
11. “Sharing the Harvest: A Citizen’s Guide to Community Agriculture” by Elizabeth Henderson, White River Junction, VT, 2007.