NAME OF PROJECT: Boys and Girls Club Demonstration Garden
NAME OF MG GROUP: Big Spring Master Gardener Association
COUNTY(IES): Greene

MASTER GARDENER CONTACT:
NAME Sandee Cook
EMAIL sandeecook@yahoo.com

MASTER GARDENER COORDINATOR/EXTENSION STAFF:
NAME Melody Rose
TITLE Extension Agent
EMAIL mtrose@utk.edu
PHONE 423.798.1710

CATEGORY---MUST SELECT AND SUBMIT IN ONLY ONE CATEGORY
X Youth

COMMENCEMENT DATE OF PROJECT: July 18, 2011
LIST THE NAMES OF MASTER GARDENERS DIRECTLY INVOLVED IN THIS PROJECT.

Project Leaders’ Names:

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<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Beth Hembree</td>
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<tr>
<td>Virginia Williams</td>
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<td>Keith Bible</td>
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<tr>
<td>Michele Bradley</td>
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<td>Jeanne Driese</td>
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<td>Larry McCracken</td>
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<td>Emily Grubbs</td>
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Number of Master Gardeners participating: 14
DESCRIPTION OF PROJECT (include name, location, target audience, goals, and partnerships) 500 words or less.

The Big Spring Master Gardener Association of Greene County (BSMGA) partnered with the Boys and Girls Club of Greeneville and Greene County (B&G Club) in July 2011 to renovate an existing, educational demonstration garden on-site for the participating youth. This partnership came about as a result of a HEAL (Healthy Eating, Active Living) Appalachia Grant. Initially, the garden was established as a result of a grant written in partnership with the Tusculum College Civic Studies group during the winter of 2010. Tusculum College students designed the garden and the B&G Club planted the beginnings of a summer veggie and herb garden. However, as summer approached, there was no available help to maintain the garden (other than one employee at the B&G Club and the youth who all worked to weed, water and plant), but the B&G Club wanted to create an opportunity to educate the youth rather than just having them weed and water. Therefore, the B&G Club contacted the BSMGA through the Greene County Health Department to determine if we would be interested in educating the youth one hour a week in the garden.

As a result, there are currently five Master Gardeners which work steadfastly with twelve youth on a weekly basis by maintaining the garden, depending on the season (pulling weeds, fertilizing, planting, harvesting, etc.). Herbs were also planted to demonstrate to the youth the effect of companion planting in the garden to increase flavor, yield, and beneficial insects to the garden. The youth rotate weekly by age groups so all interested youth are afforded the opportunity to participate. This also makes the project more manageable and enjoyable for both the Master Gardeners and the youth.

A hoop house was installed at the garden site in early winter 2012 to demonstrate how food can be grown during the cold winter months. Rain barrels were installed on site to illustrate water conservation practices, and natural and/or organic gardening principles are implemented and demonstrated. Lastly, during the spring of 2013, a 6 x 8 hard-sided, double-walled plastic greenhouse was constructed on-site for the youth to be able to start their own seeds and transplants, which will enable production and activity in the garden year-round!

Not only are the youth involved with the garden installation and maintenance, but they have several opportunities to taste the “fruits of their labor” each week as well. The Master Gardeners not only show the youth various basic aspects of gardening principles, but also incorporate nutrition into their weekly curriculum. The youth have achieved many successes, including growing their food, cooking samples (pizzas, salsas, fruit puddings, smoothies and stir-fry) for their own use, and learning new exciting ideas to make smarter food choices.

During 2012, the Boys and Girls Club had a membership of 664 youth and served 2,292 young people throughout the community through their many programs and activities. Representation in both low-income and under-represented audiences were met fundamentally through the BSMGA GROW program at the B&G Club.
DESCRIBE THE PLANNING AND IMPLEMENTATION OF THE PROJECT. 500 words or less.

- **July 7, 2011**
  Initial contact with the Boys and Girls Club (B&G Club) was made (via the Greene County Health Department) with the local UT Extension Agent to determine if the Big Spring Master Gardener Association (BSMGA) would be interested in renovating the demonstration garden and therefore create educational programs for the youth as a BSMGA project.

- **July 18, 2011**
  Four BSMGA members, along with Extension Agent, Melody Rose met with Cathy Osborne, Program Administrator of the B&G Club, to discuss the possibilities of “growing the garden!” It was determined Monday mornings would be the best time to work at the B&G Club during the summer months. Therefore, BSMGA members conducted their programs on Monday mornings from 9:15 am till 10:45 am.

- **July 25, 2011**
  The official start date of the B&G Club Youth Demonstration Garden!
  Newspaper was spread in the existing garden area, wet down, and mulched over-top with hummus/compost mix and mulch. Black plastic was laid in a third of the garden to demonstrate solarization techniques in which a later fall-crop of potatoes would be planted. Five tomatoes were planted and staked with each of the five treated with a different fertilizer and rate: Miracle-Gro, 20-10-10, fish emulsion, compost, and worm castings to demonstrate differences to the youth.

- **August 8, 2011 – May, 2012**
  Master Gardeners met each Monday to provide hands-on instruction on gardening basics. Participation varied from week to week, depending on schedules, but at least ten youth were in attendance each week. The youth also harvested their produce and learned how to create sumptuous snacks. Herbs were incorporated both into the garden and the kitchen to illustrate companion planting in the garden and culinary flavor in the kitchen.
  During the school year, BSMGA members met with the B&G Club youth at 4:00 PM. During summer months, the time was changed to 9:00 am.

- **February 2012**
  Due to the severity of Greene County winters, the BSMGA opted to install a hoop house over the existing garden area in order to gain a jump-start on production in the spring. A location inside the B&G Club was also set aside for inclement weather days. During those days, the youth were taught how to read seed catalogues and given the opportunity to choose some of the plants they wanted to grow in their garden.

- **May 2012 – May 2013**
  Master Gardeners continued to meet on a weekly basis at the B&G Club Youth Demonstration Garden.

- **April 2013**
  A 6 x 8 hard-sided, double-walled plastic greenhouse was constructed on-site at the demonstration garden by BSMGA members.

- **May 2013 – present**
  BSMGA project members met with the B&G Club to re-structure the schedule for the summer months. As a result of increasing interest among the B&G youth participants, it was decided to continue with the weekly Monday sessions, but to break the age groups apart in order to provide an opportunity for more youth. Four age groups were established (5-7 year olds, 8-9 year olds, 10-11 year olds and aged 12 and above).
The Boys and Girls Club of Greeneville and Greene County (B&G Club) Youth Demonstration Garden has been 100% funded through the HEAL (Healthy Eating, Active Living) Appalachia Grant since its inception. Although funding was provided through the grant, several BSMGA members contributed either through personal donations of money or items (such as plants, garden markers, paper products, etc.) used in the garden. Donations were also made by the BSMGA to support the program.

**HEAL (Healthy Eating Active Living) Appalachia** was established in 2008 as a collaborative effort between Mountain States Health Alliance (MSHA) and East Tennessee State University (ETSU) to build momentum in the fight against childhood obesity in Southern Appalachia. According to the Centers for Disease Control (CDC), obesity has doubled in children and tripled in adolescents over the past 30 years. Why is this significant? Obese youth are more likely to have risk factors for cardiovascular disease, diabetes, bone and joint problems, sleep apnea and social and emotional issues related to poor self-esteem.

Healthy lifestyle habits can lower the risk of obesity in children, and stem the risk factors associated with it. Upon recognizing children’s behaviors are influenced by everything that is around them, HEAL Appalachia focuses on four key areas of a person’s life to facilitate change:

- Where a person learns
- Where a person works
- Where a person heals
- Where a person worships

This is why childhood obesity is an issue that cannot be solved by one initiative, organization or even one community. However, as a community working collaboratively to develop, implement and promote solutions that work within that community’s unique culture, change can be implemented among our Greene County youth.

As a result of this partnership, The **GROW program** is a community garden/greenhouse project developed to promote and support nutrition education and reduce sedentary lifestyles in Greene County at the Boys and Girls Club.

Funds have been spent conservatively, yet adequately to build the program over the last two years:

- Hoop house materials
- Greenhouse
- Seeds and plants
- Garden implements (including, but not limited to: water hoses, trowels, gloves)
- Rain barrels
- Food items (for use in kitchen)
DESCRIPTION

Describe the outcomes of this project. How has it augmented learning, increased knowledge or changed practices to enhance quality of life? Include the methods you used to measure the impact of the project. These impacts could be economical, educational, environmental, health or community based. 500 words or less.

Issue: Childhood obesity has doubled over the past thirty years. Obese and sedentary youth are more likely to have risk factors leading to chronic disease at increasingly younger ages. Healthy lifestyle habits can lower the risk of obesity in children.

What Has Been Done: The Big Spring Master Gardeners (BSMGA) re-designed and implemented a youth demonstration garden at the local Boys & Girls Club in 2011 to actively engage, promote and enhance both gardening and nutritional concepts to all school-aged children. As a result, 1,328 direct contacts were made in school-aged youth (8-15 year olds); approximately 4,584 indirect contacts were made through exhibits, newsletters, and publications at the B&G Club, and 830 contact hours were recorded by fourteen Master Gardeners working with this project since its inception.

Impact: In conducting one-on-one evaluations, we discovered many outcomes significant to the value of this project to the community. By far, one of the most critical components of our evaluation (directed to the youth participants at the B&G Club) was to determine if they had learned anything about growing their own vegetables (garden) and thus incorporating healthy options into their diets. 100% percent had learned healthy lifestyle options since participating in the garden project.

Comments from Greene County citizens:

- “The Master Gardeners hit on all aspects of gardening to truly educate members on how to prepare a garden, choose plants, cultivate plants to maturity and implement those foods into healthy meals and snacks.” (B&G Club Director)
- “I would like to congratulate on being nominated for outstanding Volunteer Spirit. Your nomination is a special recognition of your selfless giving to our community to help make a difference in the lives of our citizens.” (Mayor of Greeneville)

Several efforts have been made to make Greene County citizens aware of this project:

- Three articles have been written by the local newspaper, reaching almost 16,000 local subscribers.
- A Facebook page with 387 friends is maintained to update progress at the project.
- A portion of the “Greene Thumb” newsletter, which is an e-newsletter written by the Greene County Extension Agent Melody Rose, is distributed to over 400 individuals, focuses on progress updates for this project.
- Both the Greene County Extension and Big Spring Master Gardener websites have current information regarding the project.
- The BSMGA was awarded a “Volunteer Spirit” Award, honoring their efforts in establishing an educational program designed to encourage healthy eating and healthy eating to Greene County youth.

Lastly, all participants evaluated responded they would like to see the garden “grow.”