

THE COMMUNITY GARDEN AT LITTLE BIG HORN COLLEGE

Jason Myers, Montana State University-Bozeman candidate for Bachelor of Arts in Liberal Studies
 Supervisor: Montana State University Professor, Department of Plant Sciences and Plant Pathology Florence V. Dunkel, PhD
 Site mentor: Francesca Pine, Little Big Horn College, Crow Agency MT, Community Garden Greenhouse Manager



Introduction

Diabetes prevention is one of the primary public health goals in Native American communities in Montana (Gohdes et al. 2004). Community-based participatory programs (CBPP) can help in understanding the process of achieving this goal (Christopher et al. 2011). Little Big Horn College's Green House Project (GHP) has been established as a primary CBPP resource that seeks improve the health of the community through increased fruit and vegetable consumption. This poster seeks to present the various outreach and education methods the GHP utilizes to achieve its goals.



Figure 1. Interior of greenhouse, Little Big Horn College Crow Agency MT



Figure 2. Francesca Pine explains to Eve Bailey, former AGSC 465R student how grasshoppers, *Melanoplus differentialis*, avoided parsley, but attacked most other plants in the 2011 growing season at the Community Garden at LBHC.

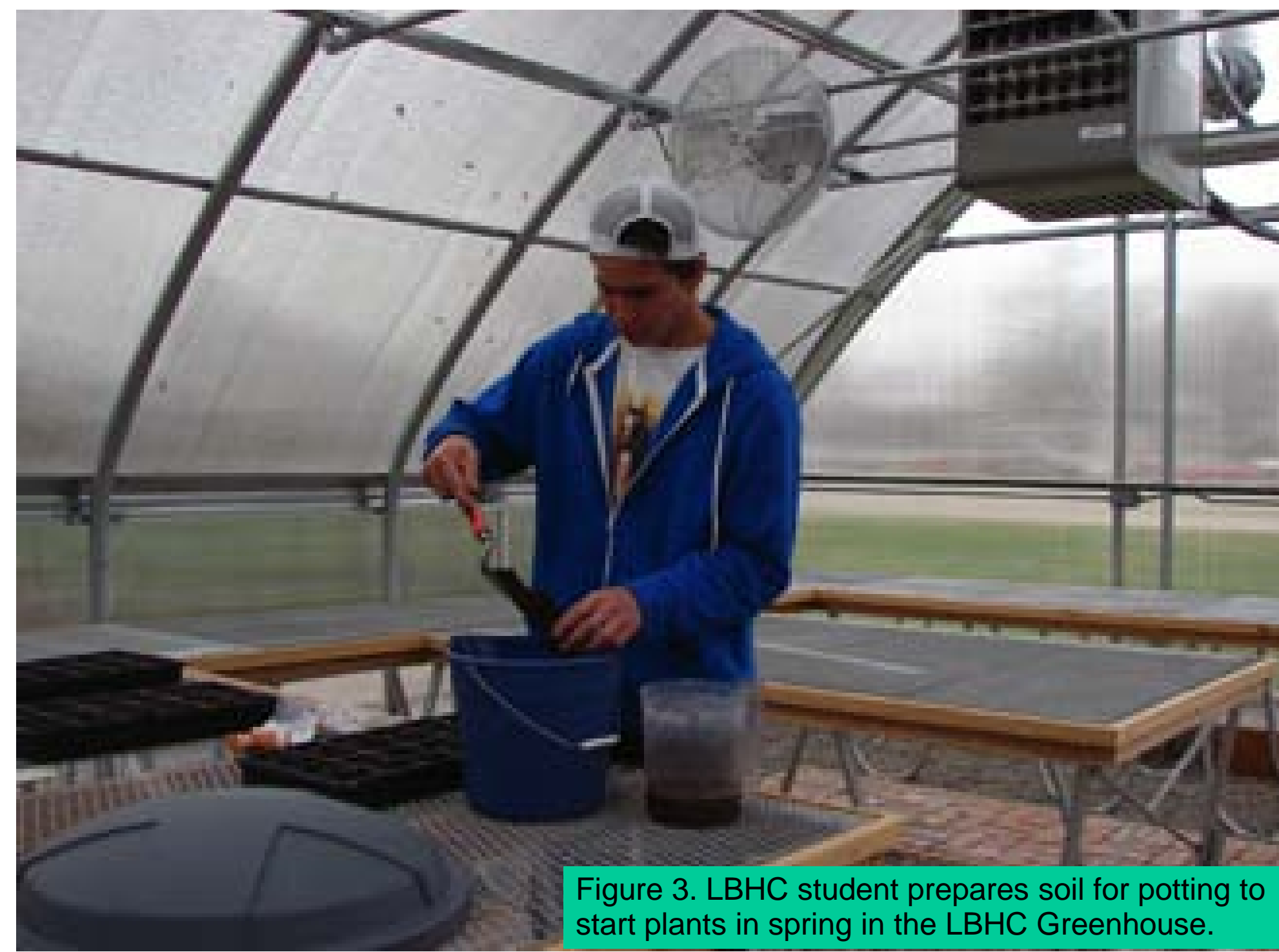
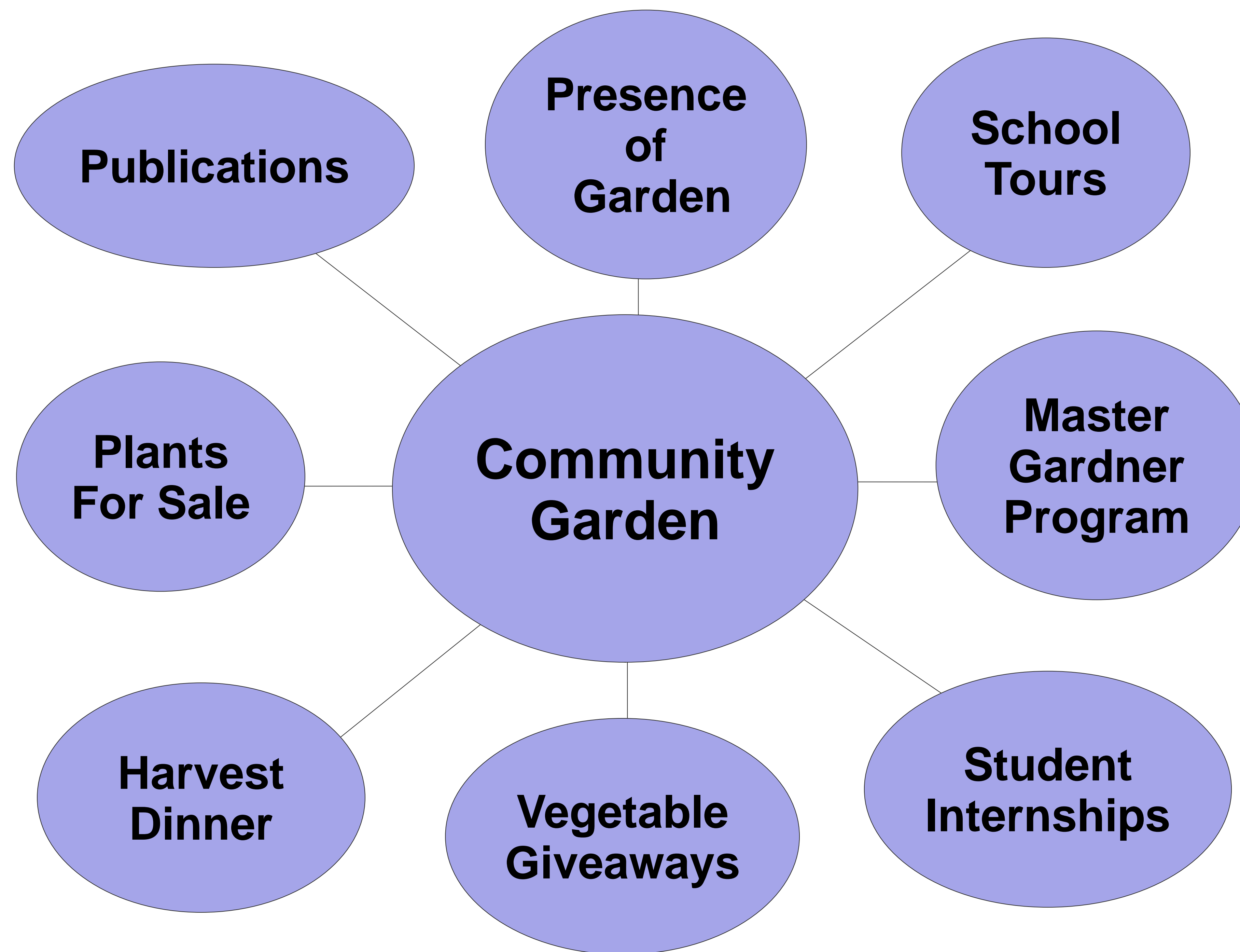


Figure 3. LBHC student prepares soil for potting to start plants in spring in the LBHC Greenhouse.



Discussion

Increasing perceived access is an important component of increasing fruit and vegetable consumption (Caldwell et al. 2008). Previous to the development of the GHP in 2010, there was no community-scale fruit and vegetable garden on the Apsáalooke Nation and sale of produce in local markets was limited. Now that the USDA grant-funded GHP is functional, it is serving to increase perceived access amongst the members of the Apsáalooke Nation.

To achieve the greatest impact, it is important for aspects of preventative health maintenance such as a healthy diet be implemented as early in life as possible. Local schools tour the GHP and its accompanying outdoor garden plot in order to implement this concept. The GHP also serves as a teaching center, seeking to encourage development of further family, school, or community gardens on the Apsáalooke Nation.

Conclusion

The GHP has surely had a valuable impact in the health and the lives of the members of the Apsáalooke Nation that have utilized its services. The variety of outreach programs are facilitating awareness and utilization of the GHP on the Apsáalooke Nation. The GHP should continue to be developed further with the participation of the community. As the impact and value of the GHP is recognized by the community, community members will have many recommendations about how the GHP could increase the impact it has in their lives as well as their friends' and families' lives.

Recommendations

Courses at Little Big Horn College should be expanded to include an Associate of Science with a small holder garden production option, as the current agricultural courses are only in livestock management. Through the help of the students, the productivity of the GHP could be dramatically increased, both as an educational center and as a source of fresh produce. As productivity is increased, the GHP could serve as a source of produce for local primary schools. The GHP could encourage these schools to utilize goal-setting strategies of fruit and vegetable consumption with the children, a proven method of increasing produce consumption.



Figure 4. Tomatoes were the most productive and favored crop of the Community Garden in 2011 and hold promise for commercialization with the Crow Merchantile in Crow Agency MT, across the street from the garden.

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<http://www.lbhc.edu/programs/greenhouse/>

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Results

Excess fruits and vegetables are given away, serving a role in increasing access for local community members. The largest giveaway occurs during a Fall harvest dinner, which also increases awareness about the GHP.

Another service the GHP offers is plants for sale for a nominal fee, usually less than five dollars. Various fruits and vegetables are available, including strawberry, spinach, and corn. The collected money is used for the expenses associated with the harvest dinner.

The GHP is in the process of creating and issuing publications, some of which are part of a collaborative effort with Montana State University students enrolled in AGSC 465R. These publications include flyers as part of the campaign to increase awareness about the GHP. Also, a cookbook based on traditional Apsáalooke recipes tailored specifically to the vegetables and fruits available from the GHP gardens will be distributed soon.

As part of a Montana State University Extension program, the GHP serves as a classroom for an eight-week course that offers Master Gardener Certification. Furthermore, Little Big Horn College students can apply for an internship at the GHP in order to further their studies and experience in agriculture.