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## A Summer Adventure – Research, Development, and Implementation of a Summer Youth Program at the Morris Arboretum

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**A Summer Adventure – Research, Development, and Implementation of a  
Summer Youth Program at the Morris Arboretum**

**Title:** A Summer Adventure – Research, Development, and Implementation of a Summer Youth Program at the Morris Arboretum

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*The McLean Contributionship Endowed Education Intern*

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**Abstract:**

Research of area arboreta, museums and environmental education centers reveals summer programming is both available and popular among families in the region. While the Arboretum has operated, as well as hosted camps in the past, it is currently a missed opportunity. Summer Adventure Camp is a proposed Arboretum-operated, supervised youth program held on weekdays during the summer months. The program will actively engage campers in informal lessons, guided walks, crafts, and games focused on the connection between plants and people, and the environment that surrounds us.

Summer Adventure Camp will enhance the Arboretum's educational impact, generate revenue to support programming and staff costs, and enhance the Arboretum's position as a destination of choice in the region. A week-long pilot program will run from June 21-25, 2010 for children ages six to eight to further test the market audience and feasibility of the new program.

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## VISION

Education is central to the Arboretum's mission and vision for the future: *to promote an understanding of the relationship between plants, people and place, and to extend an appreciation of the world's ecology, and an understanding of the importance of plants to people.* Currently, the Youth Education Program supports this mission through guided school tours and family programs, the Discover Tables and the Garden Discovery Series. With the opening of *Out on a Limb*, visitation and membership have reached high levels. As of February 2010, Arboretum memberships include 5,916 children under the age of 18, approximately one-third of total membership.

The development of summer programming was determined to be a feasible and realistic possibility to expand Youth Education Programming. It is expected new programming will improve the visitor and member experience, increase the number of children served, and increase overall community awareness of the Arboretum. The summer camp program is a sustainable, Arboretum-operated, supervised program for children and teenagers held on weekdays during the summer months.

## **FEASIBILITY STUDY**

A feasibility study was conducted to answer several questions:

- What summer programs exist in the region?
- What kind of environment is needed to run a successful program?
- Does the Arboretum have the necessary resources?
- Can the Arboretum implement a program by summer 2010?

### ***Audience***

Determining the feasibility of summer camp at the Arboretum began with researching camps at gardens, zoos, museums, and environmental education centers in the Philadelphia area. Seventeen science and nature-themed camps were held in 2009 within a 13 mile radius of the Arboretum. Further investigation focused on seven camps that had specific environmental themes. Personal interviews and e-mail conversations with camp coordinators at these institutions allowed for a better understanding of how programs are developed, operated and sustained.

Research reveals summer programming is both available and popular among families in the region and remains a missed opportunity for the Arboretum. Science and nature-themed summer programming is most often marketed to youth ranging from pre-kindergarten through middle school. A new program can grow to reach a range of youth age groups, different levels of understanding and physical abilities. There are several opportunities including programs to increase diversity or offering programs to underserved age groups. A new program could successfully generate revenue during the summer months while building further interest every year.

### ***Programming Needs***

Environmental education camps are powerful opportunities to help children develop a sense of wonder and teach them that learning, especially outdoors, is fun. Nature discovery is a valuable opportunity for personal discovery. As described in the Arboretum's Interpretation Master Plan, "It is the pleasure and delight of discovery that compels us to learn more and to do more with our knowledge" (Meyer, et al.). The most appropriate teaching environment for summer camp is child-centered rather than teacher-directed. Although the program requires structure, activities must emphasize observation and experience, rather than identification. Conversational interpretation and hands-on activities would dominate the curriculum, such as using the senses or role-playing. Games and crafts would enhance the children's understanding of the themes in energetic and creative ways. Programming would also include reflective activities that focus on making children feel good about themselves and the environment.

### ***Staffing Needs***

A full-time camp coordinator who can dedicate approximately 25 percent of their time to the development and operation of summer camp is most favorable. A full-time coordinator allows for better communication and organization of camp activities since they have an understanding of the institution's daily operations. The development of the program and marketing materials should begin in the late fall or early winter. Research reveals the need to begin registration in late winter, with some camps beginning as early as December or January.

Seasonal camp counselors are needed at a ratio of ten or fewer campers for every counselor in each age group. Educators would be hired for the entire length of the program including a week of training and planning prior to the start of camp. Programming would also provide Visitor Education Volunteers with new opportunities to aid in activities, as well as opportunities to give high school students counselor-in-training responsibilities.

### ***Facility Needs***

Minimizing conflicts with daily operations and staff appeared to be of highest concern with the implementation of any new program. From 2002-2004, the Arboretum was a staging area for the Al-Bustan Seeds of Culture Camp. Evaluations of this program found challenges with using a space also dedicated to Arboretum rentals and operations.

The spring 2010 opening of the Horticultural Center Complex at Bloomfield Farm has opened several facilities on site. Analysis of these facilities has offered two possibilities for a camp staging area: the Hillcrest Pavilion and the Bloomfield Barn. The Hillcrest Pavilion provides 420 square feet of enclosed space in case of inclement weather. The small size limits potential group size to approximately 20 children. Use of Hillcrest is feasible for a small program but would limit future expansion. Construction of the Horticulture Center has also created open space in the barn at Bloomfield Farm to use for events, given the allocation of funding and gifts for building improvements. The barn provides approximately 1,500 square feet of event space and the program could expand to at least 50 children.

## **PILOT STUDY: A SUMMER ADVENTURE 2010**

A one-week pilot program was developed for summer 2010 to test for a market audience and determine potential issues with facilities and programming. A Summer Camp Programming Committee was organized, consisting of education staff and Visitor Education Volunteers to develop themes and activities for the program. Daily themes include: *Wild Wonders*, focused on the organisms that use trees as habitat; *Green Machines*, which will look closely at the parts of a plant; *Groovy Gardening*, focused on where food comes from; *Arboretum Adventurers*, a scavenger hunt that addresses the impact humans have on the environment and trees; and *Muddy Madness*, which discusses soil and water as valuable resources to plants and people (APPENDIX A). Summer Adventure Camp carries the same mission as the Arboretum's interpretive design, *to enable visitors to become better environmental stewards at home and in the community* (Meyer, et al.). Individual messages for each day also direct the activities (APPENDIX B). In future programming, these themes could be extended into full weeks.

The Summer Adventure Camp pilot program will run June 21-June 25, 2010 for children ages six to eight. Camp will be operated out of the Hillcrest Pavilion as it is the only space available in summer 2010. The Education Intern and one other educator will implement programming. Operating the pilot with in-house staff allows the program to generate revenue with only 35 percent enrollment (Table 1). Evaluation of the pilot will include feedback from campers and their families, as well as feedback from Arboretum staff.

## **BLOOMFIELD FARM BARN MODEL**

Operating a larger program from the Bloomfield Farm barn is most ideal given the possibilities for program expansion. Occupying the barn expands camp numbers to 50 or more, depending on how the site is used. A larger space on the Bloomfield property allows for both an increase in programming and revenue, and less interference with the daily operations of the public side of the Arboretum. The barn can also be used for continuing education and other events. Operation of the Bloomfield Farm Model in summer 2011 will require budget approval by August 2010.

### ***Goals***

Implementation of Summer Adventure Camp at Bloomfield Farm has five main goals that reflect the Arboretum's mission and 2009 Strategic Plan:

- Expand the educational impact of the Arboretum (*Strategic Plan 2009, 7.0*)
- Establish a new use for an existing facility
- Enhance the Arboretum's position as a destination of choice in the region, e.g. increasing membership and school tour registrations (*Strategic Plan 2009, 7.0*)
- Create a sustainable program that supports its annual costs
- Fund a new position in Education to coordinate camp and enhance volunteerism (*Strategic Plan 2009, 2.2*)



## ***Implementation***

Operation of A Summer Adventure at the barn creates a source of revenue that can be used to fund a new full-time position in Education under Public Programs. Hiring a volunteer coordinator to build and enhance volunteerism is a strategic goal to fill a gap in current staffing (*Strategic Plan 2009*). The addition of an education staff member allows for a reorganization of the Education Work Group, assigning both a camp coordinator and a volunteer coordinator.

The implementation of the Bloomfield Farm Model should occur in two phases as program interest and demand grows (Table 2). For two years, programming would remain at four weeks. Hiring a full-time camp coordinator for summers 2011 and 2012 will require either a \$20,000 bridge in funding to cover staff expenses (Table 2), or the hiring of a part-time coordinator (Table 3). Once established, A Summer Adventure can expand to a full seven-week program, capable of sustaining its annual costs and generating profit with 86 percent enrollment (Table 2).

## **CONCLUSION**

Summer youth programming at the Morris Arboretum is a feasible initiative given the availability of a dedicated staging area, full-time coordinator, and unique programming. The Arboretum would need to incorporate the capital improvements of the barn into the annual budget by August 2010 for implementation of an expanded program for summer 2011. The use of the barn is necessary to generate revenue large enough to sustain programming and fund a new full-time education position. Several other ways to expand the program include offering the Hillcrest Pavilion program a second time, extending the length of the program, and accepting more registrations.

A Summer Adventure is a promising investment given the current trends in environmental education and sustainability. With the appropriate and necessary resources, the Morris Arboretum will develop a dynamic program providing for the achievement of several of the strategic goals, while at the same time having an overall positive impact on all departments. Summer Adventure Camp will build the Arboretum's brand, increase both visitorship and membership, and maintain the Arboretum's position as a destination of choice in the Philadelphia area.

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**Table 1.**  
**Net Revenue for Hillcrest Pavilion Pilot Program for Summer 2010.**

	<b>Summer 2010 1- Week Camp \$250/members, \$275/non-members 20 Campers</b>
<b>Expenses</b>	
Coordinator (1)	--
Educators (2)	\$800.00
Direct Expenses	\$835.00
<b>Total Expenses</b>	<b>\$1,635.00</b>
<b>Revenue</b>	
<i>With 100% enrollment of 20 campers at member price</i>	\$5,000.00
<b>Total Revenue</b>	<b>\$5,000.00</b>
<b>NET REVENUE</b>	<b>\$3,365.00</b>
<i>Enrollment required to break-even</i>	35%

**Table 2.**  
**Net Revenue and Enrollment Requirements for Bloomfield Barn 4-Week and  
7-Week Models for Summers 2011-2013 with Full-time Camp Coordinator.**

	<b>Summers 2011-12 4 Week Camp \$275/members, \$300/non-members 50 campers per week</b>	<b>Summer 2013 7 Week Camp \$285/members, \$310/non-members 50 campers per week</b>
<b>Expenses</b>		
Coordinator (1) – <i>Salary with Employee Benefits</i>	\$55,000.00	\$56,650.00
Educators (6)	\$12,000.00	\$19,776.00
Direct Expenses	\$7,929.00	\$10,074.00
<b>Total Expenses</b>	<b>\$74,929.00</b>	<b>\$86,500.00</b>
<b>Revenue</b>		
<i>With 100% enrollment of 50 campers at member price</i>	\$55,000.00	\$99,750.00
<b>Total Revenue</b>	<b>\$55,000.00</b>	<b>\$99,750.00</b>
<b>NET REVENUE</b>	<b>-\$19,929.99</b>	<b>\$13,250.00</b>
<i>Enrollment required to break-even</i>	--	86%

**Table 3.**

**Net Revenue and Enrollment Requirements for Bloomfield Barn 4-Week Model for  
Summers 2011-2012 with Part-Time Camp Coordinator.**

	<b>Summers 2011-12 4 Week Camp \$275/members, \$300/non-members 50 campers per week</b>
<b>Expenses</b>	
Coordinator (1) – <i>Part-time</i>	\$12,064.00
Educators (6)	\$12,000.00
Direct Expenses	\$7,929.00
<b>Total Expenses</b>	<b>\$31,993.00</b>
<b>Revenue</b>	
<i>With 100% enrollment of 50 campers at member price</i>	\$55,000.00
<b>Total Revenue</b>	<b>\$55,000.00</b>
<b>NET REVENUE</b>	
	<b>\$23,007.00</b>
<i>Enrollment required to break-even</i>	58%

**Table 4.**

**Updated Net Revenue and Enrollment Requirements for Bloomfield Barn 4-Week Model  
for Summers 2011-2013 with Part-Time Camp Coordinator (May 2010).**

	<b>Summers 2011-12 4 Week Camp \$280/members</b>	<b>Summers 2011-12 4 Week Camp \$280/members</b>	<b>Summer 2013 7 Week Camp \$280/members</b>	<b>Summer 2013 7 Week Camp \$280/members</b>
	<i>80% Enrollment 40 campers/week</i>	<i>100% Enrollment 50 campers/week</i>	<i>80% Enrollment 40 campers/week</i>	<i>100% Enrollment 50 campers/week</i>
<b>Expenses</b>				
Coordinator (1) – 0.5 FTE with EBs	\$22,500.00	\$22,500.00	\$23,175.00	\$23,175.00
Educators (6)	\$12,000.00	\$12,000.00	\$19,776.00	\$19,776.00
Non-Compensation Expenses	\$8,017.00	\$9,097.00	\$10,432.00	\$12,286.00
Subtotal, Direct Expenses	\$46,769.00	\$47,957.00	\$59,486.00	\$60,761.00
Program Overhead (10%)	\$4,252.00	\$4,360.00	\$5,408.00	\$5,524.00
<b>Program Expenses</b>	<b>\$46,769.00</b>	<b>\$47,957</b>	<b>\$59,486.00</b>	<b>\$60,761.00</b>
<b>Revenue</b>				
<i>At Member price</i>	\$44,800.00	\$56,000.00	\$78,400.00	\$98,000.000
<b>Total Revenue</b>	<b>\$44,800.00</b>	<b>\$56,000.00</b>	<b>\$78,400.00</b>	<b>\$98,000.000</b>
<b>NET REVENUE</b>	<b>-\$1,969.99</b>	<b>\$8,043.00</b>	<b>\$18,914.00</b>	<b>\$37,239.99</b>
<i>Enrollment required to break-even</i>		86%		62%

**Footnote:** Table 4 represents updated program expenses as of May 2010. Model accounts for weekly building operation and capital maintenance expenses at 80 and 100 percent enrollment at a constant program fee of \$280 for members.

APPENDIX A

# summer adventure camp

Monday, June 21 - Friday, June 25, 2010

## wildwonders

Discover the nature in your neighborhood on Monday. Go on a bug safari, listen for birds in the woods and uncover animal hideaways! Use your senses and imagination to detect where these creatures live and how they survive.

## greenmachines

From roots to shoots to seeds and weeds, we will learn all about the tree-mendous plants we can't live without on Tuesday. Why are they green? How do they grow? Dissect a flower, make a terrarium and examine tree cookies!

## groovygardening

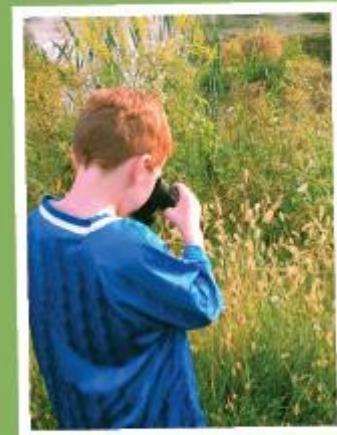
Do pizza and bubblegum come from a plant? Spend Wednesday learning where our food comes from. We will visit Bloomfield Farm, harvest summer vegetables and prepare a picnic. Yum!

## arboretumadventurers

Gear up for an exploration on Thursday! Navigate your way through all ends of the Arboretum. Work as a team to follow clues, complete a scavenger hunt and solve a garden mystery.

## muddymadness

We saved the best for last! Bring your rain boots on Friday and get ready for a wet and messy day digging in the dirt and exploring the Arboretum's streams.





## **APPENDIX B**

### ***Wild Wonders***

Messages:

- Trees are an important habitat and resource
- Plants and animals have the same basic needs
- You can be a naturalist
- We can explore nature using our senses
- The natural world is fun
- Everything in nature is connected

### ***Green Machines***

Messages:

- Plants are alive and beautiful
- Plants make their own food
- We need trees

### ***Groovy Gardening***

Messages:

- You can be a gardener
- Pollination is important
- We need plants to survive

### ***Arboretum Adventurers***

Messages:

- Stewardship of the natural world is important
- People change our environment
- All living and non-living things should be treated with respect
- Exploring the environment is fun

### ***Muddy Madness***

Messages:

- Water is important to all life
- We should protect Earth's resources